

THE NOR-WEST FARMER.

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WINNIPEG, MANITOBA, OCTOBER, 1897.

\$1 a Year,
in Advance

LIVE STOCK.

Toronto Industrial Fair.

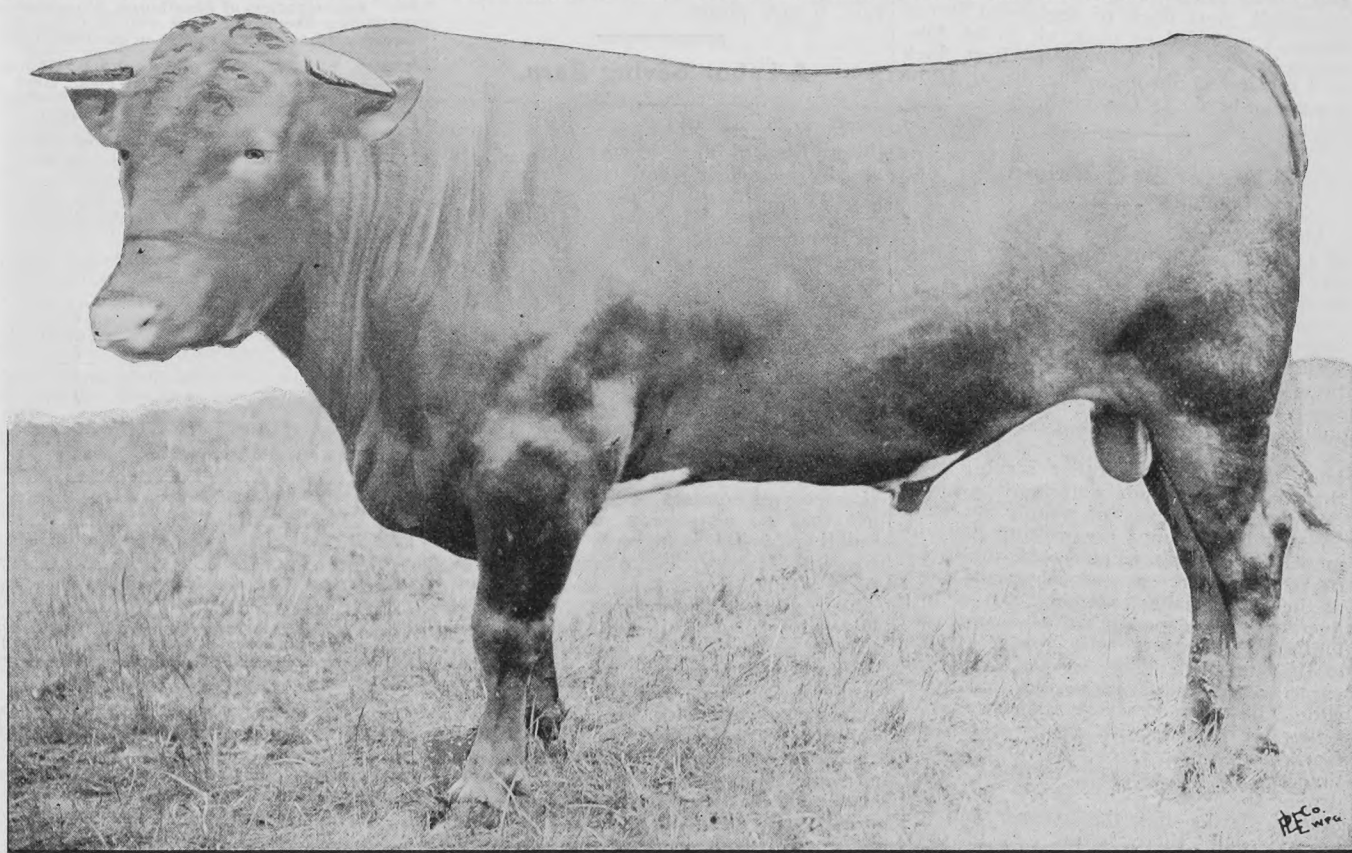
The Toronto fair this year was far ahead of any of its predecessors in point of attendance, one day making the record for 90,000 persons on the ground. The record number of 706 entries was made in the cattle classes. In Shorthorns the entries were this year much smaller than usual, which may be accounted for by so many breeders having sold extra in response to the last winter's demands from all over the west on both sides of the line.

Petite Cote had 1st and championship with Kelso Boy, and 1st in aged cows for Nelly Osborne, but the old favorite was beaten for the championship by Steacy's 3-year-old Beauty of Fairfield.

Besides the very keen and close contest in every class, mention may be made of 29 bull calves which the judges very properly divided into two classes, under 12 months and 6 months, Ballantyne & Son getting 1st. The number of herds in competition, bull and four females, was seven. Four animals, the progeny of one bull, all bred and owned by one exhibitor—1st, D. Drummond; 2nd, A. Hume & Co.; 3rd, T. Ballantyne & Son; 4th, J. McCormick & Son. Herd, consisting of

taken by H. Stevens, Lacona, N. Y., with a herd that has led in the best shows across the line. He had 1st for bull any age, female any age; herd, own breeding, and for bull and four females, besides other prizes. G. Clemons was next in order.

In draft horses, Clydesdales, as usual, led, and the interest in the judging was very keen. In aged horses, the grand old Darnley horse, Sorby's Grandeur, again led. Davies' Prince of Quality 2d, Sorby's Lord Charming 3d. In 3-year-olds, Graham Bros. led with Young McQueen, son of the well-known McQueen and bred by Ogilvies in the States. This horse had the championship of the year.



**Jubilee Chief (23144), First Prize 3-year-old Shorthorn Bull at Winnipeg Industrial, 1897.
Property of George Allison, Burnbank, Man.**

Jubilee Chief, (23144) by Royal Don, imp. (17105), calved April 25th, 1894, bred by Thos. Speers, Oak Lake, and owned by Geo. Allison, Burnbank, Man. This bull is considered to be one of the very best stock bulls in the province; dark red in color, stands on short legs, capital back, hard to beat on brisket and neck veins. This bull was 1st in his class as a year-old, 1st and sweepstakes as a 2-year-old at Oak Lake, 2nd at Winnipeg, 1896, 1st at Winnipeg, 1897, 1st and sweepstakes at Brandon, 1897, as Manitoba bred. Mr. Allison also breeds grade cattle, and this year at Brandon took 6 firsts and 2 seconds.

The other beef breeds were fairly represented, and the dairy breeds were far beyond any previous record. Capt. Robson, Ilderton, made a capital score with 4-year-old bull, 1st and championship; 2-year-old heifer, 1st and champion female, 2nd for herd and two 2d's. Messrs. Watt, Salem, had several wins. Jas. Leask's Monyuffil Lad, last year's champion, was 1st in 3-year-olds and a strong second for the championship. H. & D. Smith's Abbotsford, brother to Abbotsburn, was a good second in the aged bull class, and several of the females were of very high excellence.

Ayrshires, 179 entries, are the leading pure bred dairy stock of Canada, and all the best were there. Daniel Drummond

1 bull and 4 females, over 1 year old, owned by exhibitor—1st, R. G. Steacy; 2nd, D. Drummond; 3rd, T. Ballantyne & Son; 4th, W. Stewart & Son.

All of these exhibitors made a capital showing, and the four winning herds noted above were most attractive specimens, not perhaps to be beaten on this continent.

In Jerseys, Miller & Sibley, from Pennsylvania, showed a herd that has won lots of prizes in the States and won many here, including all the herd prizes.

In Guernseys, the Minister of Agriculture, Sydney Fisher, had 1st on aged bull, 2-year-old heifer and calves.

Holsteins were, both in number and quality, very great. Many prizes were

In 2-year-olds, R. Davies had 1st with Border Reiver, bred by Lord Polwarth, sire Prince of Millfield. In brood mares, Davies' Edith 1st; 3-year-olds, Davidson & Son 1st, also 1st as Canadian bred. Champion female, Sorby's Starlight. Messrs. Sorby had several other honors in the Clydesdale class, as had Mr. Davies. This gentleman was also a successful exhibitor in other classes, both horses and cattle.

Shires were a limited display, Crossley's Bravo champion stallion, Gardhouse's Pride of Hatfield, champion female.

In Hackneys, the great contest lay between Graham's unbeaten Royal Standard, again placed 1st, and Beith's Ban-

quo 1st as a 2-year-old at New York, and sired by the World's Fair winner, Jubilee Chief. The female championship went to Sorby's Miss Baker. This was a most attractive section, some well-known horses being present. In the high-stepping class Hackney blood also took a forward place.

Sheep, in all sections, were very good, but the fight was keenest in the Shropshire division. John Campbell has always been a leading prize-taker, but was this year challenged to good purpose by Robt. Miller, who seems to have looked up the cream of all within reach. He had winners from the English Royal and Midlands, and others that had won both in the States and Canada. These two nearly distanced all other competitors, and as a sample of the evenness of their merits may be given the latter part of their awards: Two ewes, 2 shears and over, 1st, J. Campbell; 2nd and 3rd, R. Miller. Two shearling ewes, 1st and 3rd, R. Miller; 2nd, J. Campbell. Two ewe lambs, 1st, 3rd and 4th, R. Miller; 2nd, J. Campbell. Pen of Shropshires, 1 ram, 4 ewes, and 2 ewe lambs, 1st, R. Miller; 2nd, J. Campbell. Best flock of registered Shropshires, 1 year old or over, all to be American-bred, 1st, J. Campbell. Best flock of 4 registered Shropshire lambs, all to be American-bred, J. Campbell.

Winter Beef Raising.

Mixed farming is the manifest destiny of a considerable number of the older settled farmers in Manitoba. There are sections of country in which the present prices of wheat will give a very decided impulse to increased cultivation. But within easy reach of most of these sections there are stretches more or less extensive of vacant land of the very best quality for stock breeding and feeding. Such lands are usually broken by poplar bush and willow or other scrub; often they have ready-made water supply, and if not that, the means of supply by wells and windmill pumps are waiting development. This country could turn out double or treble its present output of beef cattle at the very smallest possible cost of production. All depends on the price the increased products will bring on the world's markets. The demand at present surely warrants us in saying that pains should be taken by every farmer to avoid killing or parting with any decent calves from his regular stock, and at the same time try, by the use of good sires, to improve the quality of every beast he breeds. If he has the means, and the price is fair, there is no fear of over-production here along that line.

But the question of breeding and production lies years away in the future, and it is of more immediate importance to consider what can be done on Manitoba farms in the way of beef production before another summer comes round. What prospects are there for profit to the man who takes hold of a dozen of good 2-year-old beef steers a month from now and feeds them with feed at current values? Looking to the drain made from every point in Manitoba last spring—partly, we regret to say, to the States, partly to the western ranches, there must be only a very limited number of 2-year-old stock available for feeding purposes. If that is so, it is evident the chance of profit from winter feeding will be all the greater for those who have the beef ready at the time it is most in demand. It is gratifying to learn that there is very little spoiled wheat anywhere of this year's crop. But the government report shows twelve and a half million bushels of oats and three and a half million bushels of barley of this year's crop, and this, with

the outturn of feed from the mills, shows something like twenty million bushels of rough feed to be disposed of within the year. There is little likelihood, therefore, of feed being dear to sell off the farm, and a very great likelihood that if fed on the farm, it must be a fairly profitable way to dispose of it, to say nothing of the manurial value of the droppings from well-fed cattle. Our older lands must have manure or rest, in some cases both, if they are to be worked to profit, and manure of the best sort will yearly increase in value so long as wheat keeps above the cost of production. One way to lessen the cost of production is to increase the yield on a lessened area. We can only get more wheat from a smaller area by having it in better heart as the result of good manure.

If this reasoning is sound, and the facts are as stated, the man who can put up and feed any beast fit to carry flesh, is pretty likely next May to sell it at a better price than has been reached in the last half-dozen years. Five dollars live weight is a not at all unlikely price for any good beef beast next May. Make a note of this, if you please.

A Labor Saving Barn.

The Carberry News gives the following description of a new barn that is well worthy of a visit from those in search of improved plans of building:—

"Ever since Manitoba was settled the most enterprising and intelligent of our farmers have sought to plan the most efficient, economical and labor-saving method of attending to stock in winter. In the early days but a small proportion of the settlers were in a financial position to erect costly buildings, and, even when lack of means was not a weighty consideration, there was always a doubt as to the best class of building to be erected. While the well-tried Ontario bank barn could not be erected, owing to the level character of some farms, it was generally felt that an adaptation of that class of building would best meet the needs of western farmers. There are several features about the old style of eastern barns which need improvement. One of the worst is the difficulty of proper ventilation—a prime necessity for winter feeding of stock. It was felt, too, that a plan could be devised which should be more economical of labor, and of cost, than this, and many experiments have been made by the most thoughtful and enterprising stockmen towards that end. Among the gentlemen who have given the most careful consideration to this matter is Mr. W. G. Rogers, of the Stinson settlement, and he has embodied his views in a barn which is just completed. The News man wheeled out there a week ago, at Mr. Rogers' invitation, and took a few notes while looking over the new building, for the benefit of those of his farming friends who contemplate building in the near future.

"The building is in several ways a departure from recognized ideas in barn construction. To begin with, its shape is octagonal, the octagon being 54 feet in diameter and each of the eight sides 22 feet in length. It is built on a stone foundation. On this is built 8½ feet of brickwork which encloses the stable. The barn above is 13 feet to the eave, while from the barn floor to the top of the ventilating cupola the distance is 25 feet, making the total height of the building a little over 33 feet. Within the building, the whole design has been to centralize and save labor. The heads of the stock are turned towards the centre of the building, where there is a smaller octagon, 20 feet in diameter. In this is a well, and grain chutes connected with oat and chop bins

BREEDERS' DIRECTORY.

CARDS under this head inserted at the rate of \$1.50 per line per year. No card accepted under two lines, nor for less than six months.

W. M. KITSON, Burnside Station, Man. Breeder of English Berkshires, Mammoth Bronze Turkeys and Toulouse Geese. Write for descriptive price catalogue. 1825

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WALTER LYNCH, Breeder of Shorthorn Cattle. Post Office and Railway Station, Westbourne, Manitoba. This herd has competed sixteen times in fifteen years with both imported and home bred cattle and has won fifteen 1st and one 2nd, herd prizes.—1530

J. F. HINDMARCH, Cannington Manor, Assa. Importer of Holstein Cattle. Young Bulls and Heifers in calf for sale; sired by a son of Jewel 2nd; her butter record is 27 lbs. 13 oz. in 7 days. Prices low. Terms reasonable.

SAMUEL McCURDY, Carberry, Man. Breeder and importer of the following varieties of fowls:—B.B. Reds, I. G. and Pit Games, S. S. and G. S. Hamburgs. Stock for sale at all times.

D. FRASER & SONS, Emerson, Man. Breeders and importers of Shorthorns, Shropshire and Southdown Sheep. Pedigree Poland China Pigs a specialty, from the best strains in the United States.

THOS. SPEERS, Oak Lake Station, Shorthorn Cattle and pedigree Berkshire Pigs. Herd bull imported Heir Apparent. Pigs of J. G. Snell's best imported strains. 1601F

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KENNETH McLEOD, Dugald, Man. Chester White and Suffolk Pigs for sale. My stock are prize winners at the Winnipeg Industrial Exhibition.

W. C. EDWARDS & CO., North Naylor Mills, P.C. Importers and Breeders of Ayrshire Cattle, Shropshire Sheep and Berkshire Pigs. 1642F

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Graduate of McGill University. Diseases of animals treated scientifically. Surgical and dental operations a specialty.

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Ayrshire Bulls for Sale by Tender

Two about 18 months old, get imported Sire and Dam.

Two about 8 months old, get imported Sire and Dam.

Two imported in Dam.

My imported herd all have individual champion records. Leading Prize Herd in Canada. For Milk and Butter records they have no equal.

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FOREST HOME FARM.

Shorthorns, Yorkshires, Berkshires and B. P. Rocks. For sale.—A full choice bull Calves, by Manitoba Chief and out of dams of fine quality and breeding. Also a number of Yorkshire Boars and Sows of both spring and fall litters. Our herd of Yorkshires are of the choicest quality, as our showing record testifies. Also a beautiful lot of P. Rock Cockerels, all at reasonable prices. ANDREW GRAHAM, Pomeroy, Man. Roland—N.P.R. Carman—C.P.R. 2119

Mention Nor'-West Farmer when writing

in the barn above. On coming into the stable on a winter's morning, the farmer hangs up his lantern in the central octagon, goes upstairs to the barn, pitches down his straw and hay, comes down and feeds and waters his stock without moving 20 feet. Behind the cattle is ample room for the manure sleigh to be driven, so that the whole question of cleaning and feeding can be finished in about one-fourth the time that it would take for a man to bring hay by forkfuls from the stack in the usual fashion. The stable is excellently lighted, and two ventilating shafts give ample air. Besides the ease with which animals can be attended to, the barn has the great advantage of being economical in cost, and being able from its shape to successfully resist the strongest winds. The central stall will accommodate forty head, and there is ample room for another two dozen against the outer wall. Provision has been made for a windmill to be erected over the cupola. The total cost was about \$900, itemized as follows: Stone for foundation, \$27; 22,000 brick at \$9, \$198; lumber and shingles, \$335; labor, mason and bricklayer, \$90; carpenter, \$120; painter, \$30. The well, hardware, etc., make up the balance. "Mr. Rogers intends having all his

Fancy Prices.

Australia still beats the world for fancy prices for sheep. At recent ram sales held at Sydney quite a considerable number of rams realized between \$1,000 and \$1,500 each, and a few sold at much higher prices. Mr. James Gibson's Waterloo, by the famous ram President, which was sold last year at the enormous price of \$8,320, was knocked down at \$3,000, whilst Royalist, another of President's progeny, bred by Mr. W. H. Gibson, of Tasmania, was sold at \$5,200. For Mr. S. McCaughey's (Vermont) Aristocrat, this year's grand champion prize ram at the show of New South Wales Sheep Breeders' Association, a bid of \$3,900 was refused, the reserve price being \$5,200.

Wheat Versus Cattle.

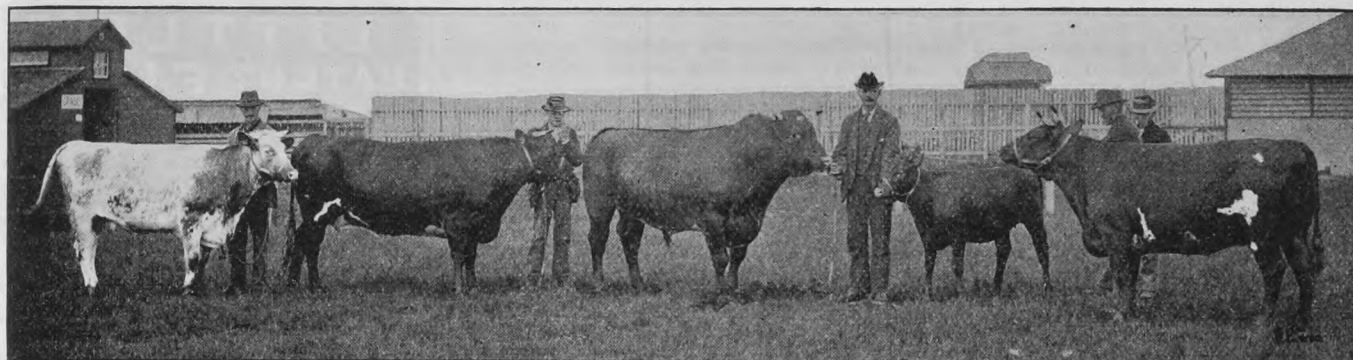
The other day a farmer of ripe experience was busy stacking hay, when a neighbor passing, stopped to criticize—a very good thing, if properly done. The critic has been on the shoals a good few years. The crops have hardly paid their

the men who believe in having two strings to their bow.

The Suffolk Pig.

A. C. Green, a well known and successful breeder of Suffolks, has the following to say about them:—

"Breeders of Suffolk swine are not as numerous in the United States as the breeders of many other breeds of swine, which is one cause of this lack of equal notoriety, but since the forming of an association those interested are bringing them into greater popularity, which is making the demand much greater among the farmers, and numerous herds have been started in all parts of the country. Since the first importation of the Suffolk into this country great improvement has been made in the individual animal, so that at present he is well entitled to claim a good place among the improved breeds. The Suffolk is a white hog, with small head, very dishd face; short, erect ears; short, full neck; broad back, good quarters, rather thin on the belly, fair depth of body, short and rather slender legs. It is prolific, and the sows are good sucklers. It is quite easy fed, kind of disposition,



Shorthorn Herd, property of Andrew Graham, Forest Home Farm, Pomeroy, Man.

It is doubtful if there is another man in Manitoba who has come to the forefront ranks as a breeder so rapidly, or who more thoroughly enjoys the confidence of the public, than does Andrew Graham, proprietor of the Forest Home Farm, Pomeroy, Man. The foundation of this herd was laid in 1892 by the purchase of three cows from the herd of Graham Bros., Ailsa Craig, Ont. The first calf dropped on the farm won at the 1893 Industrial, 1st in his class, also 1st as a bull, any age, bred in Manitoba or the Territories. Last winter, Mr. Graham made a trip East and brought back with him six head of choice cattle. This new importation makes the Forest Home herd one of the very best in Manitoba. Manitoba Chief, a son of Famous Chief, is the stock bull at the head of the herd, and although never having been put in show fit, has been three times a winner at the Industrial. In herd, bull and four females, this herd took the blue ticket at the last Industrial. Had it not been that Necklace 21st, a three-year-old of beautiful quality and great substance, (purchased from the herd of J. I. Davidson, Balsam, Ont.) went wrong in calving a few weeks before the fair, this herd would have crowded the best very close for first honor. Necklace 21st will likely be heard from again. A fine yard of B. P. Rocks is also kept on the Forest Home Farm. A large business has been done during the spring season in supplying eggs for hatching. Choice Cockerels can be had now from this yard at low rates.

straw blown into the barn by a cyclone stacker, so that it can be fed easily. The brickwork on the stable is plastered and whitewashed. He intends to build a bank approach to the barn next spring so that his hay can be stacked there. Under the approach he purposes building a chicken house."

A Sheep's Jaw.

There is a peculiarity in the mechanism of a sheep's jaw and grinders that helps one to understand the reason why sheep are able to get so much nutriment from their food. In noticing a sheep chewing its cud it can not but be observed that the jaw has a peculiar motion from side to side. The branches of the lower jaw are closer together than the molars are in the upper. Then in the molars their edges have different slopes. In the upper row the face of the molar slopes very decidedly from the higher inner edge to the lower outer, while in molars of the lower jaw the face slopes from the outer edge to the higher inner. These things, together with the rough sides of the molars, gives a sheep the power to thoroughly grind its food.—Prof. J. A. Craig.

way, and his live stock are few, and of a poor sort. But the jump in wheat has swelled his head a little, especially as the season has suited his land. The man criticized has always a good bunch of cattle, which, of course, means a busy hay time, and a lot of scheming to feed them.

Said the critic: "Man, I wonder to see you working there for next to nothing; an acre of my wheat is worth as much as a two-year-old steer, and costs me very much less to raise it." The reply was: "I grant the truth of all you say, but then I believe in insuring all I own. I insure my house and furniture, my stables and grain, and in this country that means a big lot of money gone, for I have never had a fire. But I keep on insuring, for we never know what may happen. For the same reason I keep my cattle. Sometimes I make a fair profit out of them, sometimes very little, but they are always there to cover the risk of a dry summer or a frosty night in harvest. I'm safe whatever happens, and the time I make my hay I can do little else that would bring in money. I'll go on just as I have always done, and some day there may be a jump in cattle, too."

This is homely philosophy, but it is full of common sense, and is recorded here for the benefit of those who are inclined to doubt in a year like this the wisdom of

and exceedingly hardy. It will fatten readier on grass than any other breed, and they are unequalled for crossing on any other breed. They can be confined in a much smaller space and thrive better than most any other breed. Their growth is rapid, and they lay on flesh and reach maturity quicker with a less amount of food than any of their competitors in the world's market. Their flesh is firm, yet tender and juicy. Having extraordinary digestive powers, they need but little exercise to digest their food, and at the same time build up and lay on flesh with as much rapidity as any other breed."

Kenneth McLeod, Dugald, had some very good Suffolks at the Winnipeg exhibition, and farmers in the neighborhood who have bought from him say they cross well with other breeds.

It is just as important with horses to breed for intelligence as it is with the human race. A dumb, stupid colt can never be educated to be a valuable horse. Without intelligence it will always be sluggish, and will never have an attachment for its master, nor manifest any disposition to obey and serve him as a pleasure. Most intelligent horses are naturally docile, or can be easily trained to be kind, reliable and even affectionate.

Australian Sheep Shearing.

Few people have any idea of the magnitude of the sheep industry of Australia. On all the large stations the Wolseley clipping machine, invented by a brother of Lord Wolseley, is used, and a steam engine supplies the power to work the various machines. A visitor to one of these stations gives a vivid description of the shearing as follows:—

"The whirr and buzz of revolving wheels, the varied and incessant cries from hundreds of sheep, the patter and scurry of hoofs on the wooden floor, the shouting of orders and directions, the hurried tramp of feet, the snorting puff of the engine, the rattle and clank of the woolpressing chains, mingled with the sharp, impatient bark of the sheep dogs, seemed at first a deafening Babel, out of which it would be impossible to extract anything like order. Through this turmoil we are piloted with considerable dexterity, and placed in the comparative quiet of a sheep pen, with some dozen woolly companions, evidently as much at sea as ourselves. From this vantage ground one can see the whole length of the shed. The floor is raised about four feet from the ground and is about 150 by 60 feet. There is an offshoot room containing the rolling tables, bins, wool press, etc. Down the centre of the shed are a number of small pens for sheep about to pass under the shears. One side has the engine room and large drafting pens, whilst the machines, 44 in number, occupy the entire length of the opposite side. A revolving shaft, to which are attached the india-rubber tubes, contains the cords which work and carry the shears. A small handle, within easy reach of the shearer, cuts off communication with the shaft when the shears are not required. Below each man is a shoot, through which the shorn sheep pass and the tallies for each shearer are kept. From where I stand I can see the 44 men, most of whom are tall, lanky and agile. The expression on their faces is most marked—eager, earnest, energetic. They are stripped of all clothes save trousers and shirt, and the perspiration is streaming from their faces and necks, which are blackened with dust and smut. They scarcely look up, and not a moment is wasted. All is accomplished so quickly that it is difficult to take in what has been done. There appears to me to be only a few confused seconds from the time the sheep is seized in the pen and carried across to the shears. There is the waving of hoofs and glitter of steel, when, in a twinkling, the fleece is on the floor, the sheep down the shoot, and the shearer wiping his face with his arm, is walking across to seize another. I turn to Mr. McDonald, amazement, I suppose, printed on my face, for he informs me that the three men just opposite, and whom I have been watching particularly, are the champion "wringers" of the district, and can "polish off," with ease, their 150 in a day of eight hours. As the fleeces are thrown on the floor, they are picked up by boys, who, with a dexterous turn of the hand, spread them out on the tables, where they are twisted, rolled up, and passed on to the wool-sorter, who appoints each fleece its bins according to quality. From the bins it passes to the wool press, which it leaves a square, tightly packed bale weighing from three to four hundred-weight. It is next weighed, numbered, and initialed, rolled up an inclined plane to the dray, which, as soon as loaded, is taken to the railway station, for, since the shearer's strike, few squatters care to risk the wool on the premises in case of fire. In the middle of the forenoon and afternoon the men "knock-off" for a smoke, and have tea with "brownie," a kind of sweet cake made with dripping and currants. They

have their shears sharpened at these times.

"When we left the shed, we were shown the sheep dogs at work. Their accomplishments are certainly marvellous, did time permit to enumerate. One instance—The overseer's dog, "Bunker Hill," is named because he was born on the anniversary of that famous battle. His master lighted his pipe, and threw down the burning match. In a moment Bunker's paw extinguished it. At the call of fire, the dogs were instantly on the alert, each vying with the other to put it out."

The Scotch Ram Sales.

Half a century ago a black-faced sheep was just that and nothing more, and the man who paid \$25 to \$50 for a good ram was thought rather extravagant. This year the highest price of the season has been made for them. At Lanark, where the cracks of the breed compete, the champion of the breed at the National show, Prince Alfred, a 5-year-old, was sold at \$600. A shearling made \$500, and the best five of the same lot made an average of \$385, the whole lot of 22 making \$137 average. Twenty-two from the same flock as Prince Alfred (Hewatson, of Glenbuck) averaged \$128. A great controversy has been running for months as to the value of "strong" and "fine" skins, but in the sale ring the strong skins made the money.

At Kelso, where the Border Leicester breed is the attraction, and Lord Polwarth's the crack flock, his best ram made \$475 and the next \$375. His best last year made \$1,050. Wallace, of Anchelbrain, made an average of \$175 for a small number of picked rams, the highest going \$480. The butchers' boycott has caused considerable feeling of late, as they had decided to boycott any auctioneer who sold to co-operative stores. One spirited farmer refused to bow to this dictation and withheld his sheep from the firm that had obeyed the boycott, hiring another man, and selling 100 sheep at an average of \$50. Evidently the buyers were in sympathy with this independent action and bought at this capital price.

Lincoln Sales.

The Lincoln breed of sheep contests with the Shropshire for the highest place and price in the English market. At Lincoln, on Sept. 3, six breeders made top figures, running from \$1,150 to \$550 and averages running from \$407 for 12 rams down to \$203 for 15. At this the leading mart for the breed, 453 rams were sold for \$56,765, an average of over \$125 a head. The demand for this big long-woolled breed has been much stimulated by the demand from the Western States for rams to cross on Merinos. New Zealand has also taken a fancy to try them, so as to meet the demand for lustre wool, which this breed supplies in greater perfection than any other.

The London, Eng., Live Stock Journal says that after a long calm there is now a prospect of increasing demand for Herefords in Canada and the States, especially on western ranches, where the Hereford cross on range cows has proved profitable. The first purchase is already on the way west.

There is a report apparently too well founded that tuberculosis has made sad havoc among the cattle on the Kansas state farm. The wife of Prof. Georgeson is said to have got badly infected by using the milk, and the latest report is that the men in charge have also contracted the disease, some of them not being likely to recover.

Merit

Is what gives Hood's Sarsaparilla its great popularity, increasing sales and wonderful cures. The combination, proportion and process in preparing Hood's Sarsaparilla are unknown to other medicines, and make it peculiar to itself. It acts directly and positively upon the blood, and as the blood reaches every nook and corner of the human system, all the nerves, muscles, bones and tissues come under the beneficent influence of

Hood's Sarsaparilla

The One True Blood Purifier. All druggists. \$1.

Hood's Pills cure Liver Ills; easy to take, easy to operate. 25c. 1611F

To Stockmen and Breeders.

LITTLE'S PATENT FLUID

NON-POISONOUS

SHEEP DIP AND CATTLE WASH

For the destruction of Ticks, Scab, Lice, Mange, and all Insects upon Sheep, Horses, Cattle, Pigs, Dogs, etc.

Superior to Carbolic Acid for Ulcers, Wounds, Sores, etc.

Removes Scurf, Roughness and Irritation of the Skin, making the coat soft, glossy and healthy.

The following letters from the Hon. John Dryden, Minister of Agriculture, and other prominent stockmen, should be read and carefully noted by all persons interested in Live Stock:

"MAPLE SHADE" HERDS AND FLOCKS.

BROOKLIN, ONT., Sept. 4th, 1890.

DEAR SIR,—I cannot afford to be without your "Little Sheep Dip and Cattle Wash." It is not merely useful for Sheep, but it is invaluable as a wash for Cattle, etc. It has proved the surest destroyer of lice, with which so many of our stables are infested. I have ever tried; it is also an effectual remedy for foul in the feet of Cattle. I can heartily recommend it to all farmers and breeders.

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17 Gold, Silver and other Prize Medals have been awarded to "Little's Patent Fluid Dip" in all parts of the world.

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IMPORTANT TO BREEDERS AND HORSEMEN!

The Eureka Veterinary CAUSTIC BAL-SAM, a reliable and speedy remedy for Curbs, Splints, Spavins, Sweeney, etc. It can be used in every case of Veterinary Practice, where Stimulating Liniments or Blisters are prescribed. "See pamphlet which accompanies every bottle." It has no superior. Every bottle sold is guaranteed to give satisfaction. Price 75c. per bottle. Sold by all druggists. Invaluable in the Treatment of Lump Jaw in Cattle. "See Pamphlet."

Prepared by THE EUREKA VETERINARY MEDICINE COMPANY, London, Ontario. Wholesale Agents for Manitoba—THE MARTIN, BOLE & WYNNE CO., Winnipeg.

When writing advertisers, mention The Farmer

Influences of First Impregnation.

Some of the leading agricultural journals have been discussing the effects of the first impregnation in the heifer and her future get, some writers claiming that a scrub male making the first service on a pure blood female cannot have any bad effects in transmitting his blood to the future offspring of the female. Those who hold this view are in the wrong, and their position will not be borne out by the facts in a majority of cases. The influence of the male is generally stronger on the offspring than is that of the female, and his influence on the female in subsequent offspring not his is also stronger than can be that of the female. Stating the case briefly, the nature of the young female is changed at the first impregnation and all subsequent breeding shows, as a rule, that the influence of the male is more powerful than that of the female. Suppose that a Jersey heifer is bred to an Angus bull—the calf will be half-blooded Jersey and half-blooded Angus. During the nine months of pregnancy the blood of the Jersey heifer passes through the umbilical cord to the growing fetus of the coming half-blood, returns through

How to Train a Dog.

A subscriber tells us he has a boy who is very fond of teaching his dog, and wants a few hints to encourage him. Such a taste is not to be discouraged, and few have any idea how much a dog can learn, if it is of good, intelligent stock. Training continued through many generations lies at the bottom of the many varieties of dogs with their wonderful intelligence, of which the shepherd's collie is a familiar and pleasing example. In this issue mention is made of the activity of Australian sheep dogs in putting out fire from matches. "First catch your hare," says the cook book, and to ensure marked results the training should be spent on a dog with good brain power. The following hints from an exchange may be of value:—

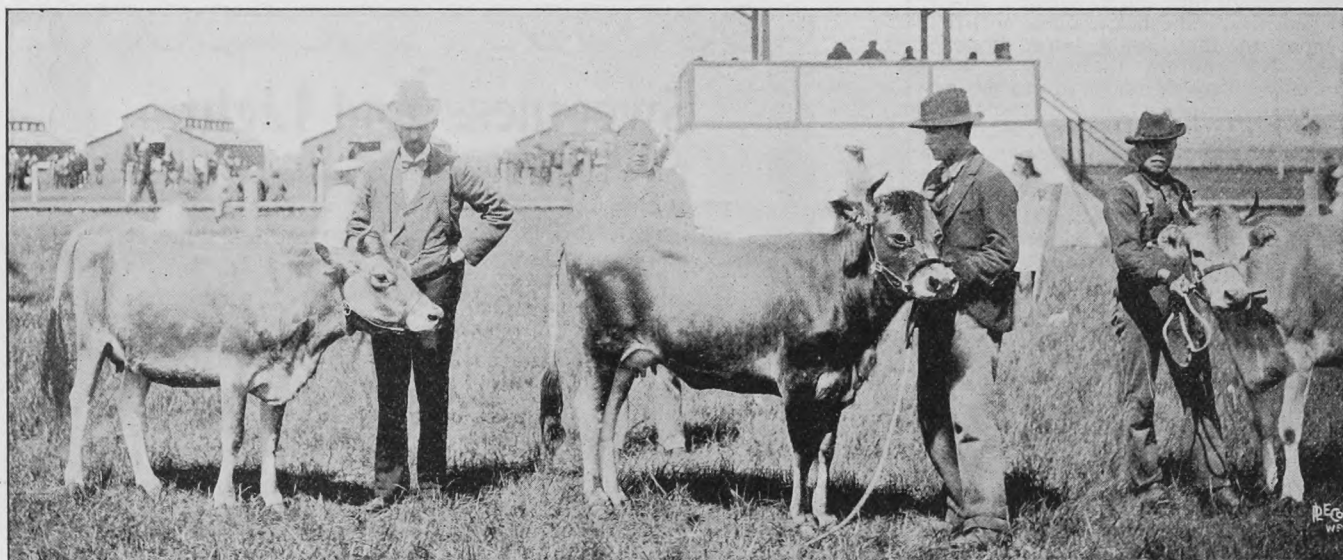
The first step in training your dog is to attach him to your person, to make him very fond of you, so that the slightest cross word you may speak will be punishment enough, without resorting to a stick. In training a dog it is never necessary to strike him; he is more affected by a scolding than is a child, and consequently does not need a slipper. You

"Sit up!" should be constantly repeated so that the commands will become familiar with the actions.

To "shake hands" when he is "sitting" give him a slight cut under the right side of his nose; this will make him lose his balance so that he will raise his right paw, which you must shake, saying, "Shake hands!" When he becomes familiar with the words in connection with his actions, he will readily obey alone. Practice is the principle thing.

Horses' Feet.

From the birth to the death of the horse, says a fellow of the Royal College of Veterinary Surgeons, the hoof requires attention, if it is to be kept in a healthy condition. It is before the hoof is shod that the feet are generally neglected, because they are young and immature, and the boxes and other tissues are soft and could be easily distorted to suit the conditions under which they are kept. The feet of foals and growing horses should therefore have attention given to them, since neglect at that period often sows



Trio of Yearling Jerseys from the Herd of Messrs. Geo. Smith & Son, Grimsby, Ont.

This herd is founded on the famous St. Lambert strain, in which there are so many grand cows of strong constitution and great butter and milk producers. The Messrs. Smith are trying to introduce this hardy strain into North Western Canada, and thought the best way was to let the public see what they had, so they brought a carload of young stock to Winnipeg and Brandon exhibitions, and while at Winnipeg The Farmer secured the photo of the above three yearlings, just coming two years, from which the illustration is made.

the same cord to the heifer to be rejuvenated by her system and repurified by her lungs, and again passed through the embryo half-blooded calf. When finally the calf comes into the world it is strongly tainted with the blood of the Angus bull, and so is the system of the heifer. In all subsequent dropping of calves the blood of the Angus will manifest itself to a greater or lesser degree. This influence of the male on the offspring should be taken advantage of for breeding up a herd, but it should not be allowed to run down a good herd, as it surely will if a scrub sire is used.

Following the facts as they are, i.e., the tendency of the heifer to produce more like the male than herself, then a scrub heifer continually re-bred to the same pure-bred bull, should, as a rule, produce a calf more and more like the sire each succeeding time.

The highest price paid this year in England for rams was for a Shropshire owned by A. E. Mansell, which made \$885, and another from the equally well-known Bowen Jones at \$960.

should never scold a dog "for fun" to see how "sorry" he will look; reserve your scolding as a punishment, or you will lose all authority over him. Never be afraid of encouraging him; let him know when he has done right, and he will be anxious to do it again.

To teach him to jump place a stick in a doorway, where he cannot crawl around it; at first place it very low, so that he can walk over it, and when he understands you can raise it gradually. If he doesn't understand at first jump the stick yourself to show him, and he will follow your lead.

"Begging" is easy, as it is natural for a dog to want food; but if he snaps at it too soon cuff his nose, and he will soon learn the proper way. By practice he will get his balance on his hind legs, and be even taught to walk on them by following the morsel about.

When he has mastered this he can be taught to "sit up." When standing on his hind legs you must take one paw in each of your hands and gently press him into a sitting posture, saying, "Steady! Sit up!" The words "Stand up!" "Walk!"

the seed of continuous trouble. The hoofs should be kept clean by being "picked out" as often as possible, to prevent any dirt or hard substance being buried in the fissures of the feet. They should be examined from time to time (say every six or eight weeks), to detect any defects of shape that might be taking place. If the feet are not growing level, and symmetrical, they should be rendered so by rasping away the horn which is not naturally worn down. If that is neglected, the animal will soon have the fetlock joint bending over towards the outside. On no pretence whatever should the front of the walls be interfered with, for the glazed coating of its surface protects the horn beneath; it should therefore be left untouched. It would be as well to disabuse people's minds of a very popular fallacy, viz., that wet soft ground, and even manured yards, are the best places to keep young horses—and some would even have the frogs and soles pared thin to allow the moisture to penetrate more easily. No greater mistake is made than that, for the preservation of the hoof depends to a great extent upon the soil the

animal was reared on. The best footed horses are bred on dry soils, and that is undoubtedly the kind of ground best adapted to the healthy growth of horn. Young horses require plenty of exercise, and unless they are allowed it, the growth of the horn, etc., is sure to be defective. Then the question arises: When ought a horse to be shod? The answer is, when the work required of the animal wears the horn away faster than it is formed or grown, or, in other words, so long as the horn of the foot can stand the wear required, it will not need protecting, (shoeing). Moreover, if the young horses are not shod so early, they will not be worked so hard, and fewer would be ruined in their youth, as is often the case at the present time.

The well-shaped, delicate ears of the horse are capable of being moved separately in every direction, and every movement is full of meaning and in sympathy with the eye. The eye is prominent, full and large, and it is placed laterally, so that he can see behind him without turning his head, his heels being his principal weapon of defence. His nostrils are large, open and flexible, and his lips fleshy, though thin and exquisitely mobile and sensitive. The large, open nostril is essential to him, as a horse breathes solely and entirely through it, being physically incapable of breathing through his mouth because a valve in the throat actually precludes him from doing so. Hence the mouth of a horse without a bridle in it is opened only for purposes of eating or biting, but never from excitement or exhaustion, like that of most other quadrupeds, except the deer species.

Though it is very seldom that any striking discovery is made of sufficient interest to be referred to in non-scientific papers, there is a constant increase in the number of different species of animals actually known to science. The list has already grown to be of enormous length, yet there is no probability that naturalists have nearly succeeded in observing all the different sorts to be found on the earth, at least in some divisions of the animal kingdom. The most trustworthy figures are those published by the editor of the Zoological Record, who has devoted many years to the study of the subject, and these put the known number of distinct species at 336,000. By far the greatest share belongs to the insect world, which is credited with 230,000 species, and yet some have declared that there are as many as 10,000,000 different kinds of insects, so that entomologists have still an ample field for fresh researches.

No colt is well broken until he is accustomed to startling sights and sounds, and has become convinced that they will not hurt him. Sudden and alarming sounds are things he is quite likely to encounter along the road, and the knowledge that they will not hurt him will save disastrous runaways, which destroy property and life, and make the horse worthless as a driver. A prudent horseman is always on the alert to make his young horse acquainted with everything which he is likely to see on the road. A stray paper blowing across the road may startle a horse, but if the driver is wary he will take the opportunity to teach him that there is nothing to fear in what looks alarming, and this lesson usually suffices for an intelligent animal. After a time, the horse has confidence in his driver and takes it for granted that he will never get him into trouble. Many disastrous runaways would be prevented if horses were carefully broken and familiarized with the alarming common things which are apt to be seen on country or city roads.

There are a great many occult defects in the horse that are hard to detect, but which come to the surface after purchase, when circumstances occur to render them obvious. For this reason a horse should be examined under all the varying circumstances possible. He should be tried in harness, in the halter, under saddle, and in all possible ways. See how he goes when he backs. Many a bright eye is useless so far as vision is concerned. Some defects only appear when the horse is standing still. He should be examined in this way to see whether his attitude is firm and square, or whether he favors one or other of his feet. The horse that straddles behind is apt to have weak loins. The ears are a good indication of bad temper. Watch for blemished knees, which indicate a stumbling habit.

The Western Agriculturist says:—Agricultural fairs are behind the times in giving premiums to grade bulls and all purpose horses. It is not so bad to give premiums for grade cows, but to encourage the breeding to grade bulls by awarding premiums to them by an agricultural society that is supposed to develop the improved stock industry, is on a par with

still awarding a premium on all purpose horses in these times when there is no such class in demand in our markets. The whole science of breeding and the experience of breeders everywhere, is against the use of grade sires of any kind that are quite as apt to breed back to their scrub ancestors as to the good blood. The markets demand better stock, and it is only by breeding to pure bred sires that we can improve our stock and weed out the scrubs and grades.

The Cheviot sheep from the Cheviot Hills of Scotland are making steady progress in the favor of farmers in the hill-side districts of Eastern New York and have pushed their way west, where they have also proved popular. One of the best flocks of the breed is that maintained on the Fenimore farms of Mr. E. S. Clark, Cooperstown, N. Y. These sheep are descended from early importations, and have been bred pure for nearly fifty years.

W. W. Guthrie, Atchison, Kan., has a herd of Polled Herefords now in the 6th generation reproducing their true Hereford type, but without horns.

Sweetness and Light.

Put a pill in the pulpit if you want practical preaching for the physical man; then put the pill in the pillory if it does not practise what it preaches. There's a whole gospel in Ayer's Sugar Coated Pills; a "gospel of sweetness and light." People used to value their physic, as they did their religion,—by its bitterness. The more bitter the dose the better the doctor. We've got over that. We take "sugar in ours"—gospel or physic—now-a-days. It's possible to please and to purge at the same time. There may be power in a pleasant pill. That is the gospel of

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It cuts both ways, does not crush. One clip
and the horns are off close. Write for circular. The Keystone Dehorner Mfg. Co., Picton, Ont., Can.

THE KEYSTONE
—KNIFE—

Band, Herd and Flock.

John Hallam, the well-known Toronto hide man, says: "This continued exportation of cattle to the United States will certainly cause an increase in the price of both beasts and hides in this country. We are going to have something like a cattle famine, and prices will go up \$5 to \$10 per head."

It is curious to reflect that several of the breeds of sheep which are now most popular have been entirely developed—one might almost say constructed—within the Victorian era. The Shropshires are a notable case in point, and other instances, which might be mentioned, are the Hampshire Downs, the Oxford Downs, the Suffolks, and the Devon Longwools.

Scotland has in all 79,000 farmers, owning 1,200,000 head of cattle. Of these 20,000 are Crofters, etc., occupying less than five acres of land. There are 34,000 more small farmers and dairymen, occupying less than fifty acres of land. This leaves 25,000 farmers with an average holding of 160 acres, each of them owning a capital of \$5,000, the sum which it is supposed essential to enable a man to start business as a tenant farmer. These

VETERINARY.**Answers to Questions.**

By an Experienced Veterinarian.

As it is desired to make this column as interesting and valuable as possible to subscribers, advice is given in it free in answer to questions on veterinary matters. Enquiries must in all cases be accompanied by the name and address of the subscriber, but the name will not be published if so desired. Free answers are only given in our columns. Persons requiring answers sent them privately by mail must enclose a fee of \$1.50. All enquiries must be plainly written, and symptoms clearly but briefly set forth.

STERILITY.

Subscriber, Saskatoon, N. W. T.—"In this neighborhood we are having trouble with our cows to get them in calf. They keep coming around, time after time, after the bull has served them. Some of them will come around in a week's time, and some in two weeks, and some have appeared to be all right for two and three months, and then come around again. The cows were well wintered, and are in good order now. Now, of the bull. He is four years old, has got some in calf that were the same as above last year. He was wintered on hay and some grain,

work for a living. In addition to this, a purgative dose should be administered at the time when the heat appears, and the cow should not be served until she is going off. A pound of Epsom salts, mixed with half a pound of common salt, dissolved in warm water, is a suitable dose for an averaged sized cow. Bleeding copiously from the neck vein shortly before service is sometimes found beneficial. It operates in a manner similar to the salts by lowering the plethoric state of the system. While the above is given as the most probable cause of sterility in this particular instance, it may be well to enumerate some of the others, so that, if any are found to be present, they may be avoided. They are: In-and-in breeding, feeding on grasses or hay containing ergot, smutty wheat, rusty straw, laxative or diuretic water, i.e., water which acts strongly on the bowels or kidneys. These are the best known causes of sterility, apart from inflammation or disease.

Another Good Barn.

The Whitewood Herald gives an account of a capital barn just built by A. B. Petter, Montgomery, Assa. The first



Holstein-Friesian Bull and Cow, owned by J. T. Hutchinson, Hayfield, Man.

The Cow, Tempest 3rd, (16399) C.H.F.H.B., bred by J. B. Fort & Sons, Stronghurst, Ill., was first in her class for cow over four years old, second for the Sweepstake prize of Hon. Mr. Greenway for the best cow, any breed, and 3rd in the milk test, any breed. The bull, Zeline Aggie Clothilda, bred by W. J. Young, and is from Zeline Aggie by Porna 3rd Clothilda, was also first in his class as a two-year-old. He has never been beaten in a show ring; was first at Brandon and Souris as a year-old. This is the first time that this herd has been shown at Winnipeg Industrial and it made a good showing, taking 3 firsts, 4 seconds and 1 third.

25,000 farmers fatten every year 250,000 head of cattle, besides sheep.

In last issue of The Farmer mention was made of the report by John Speirs, of Newton, Glasgow, on the sanitary condition of the much vaunted Danish dairies. The Marquis of Londonderry, at a recent meeting, repeated these charges and pointed out that the British health authorities should look into the matter and see that the dairy produce of foreign countries should not be allowed to compete on the English market on the same terms as that produced in English dairies, in which sanitary conditions are much more carefully maintained.

The boom in pure bred hogs has apparently got as high as it can well go. The famous Poland China boar, Klever's Model, has been bought by a breeders' association in Central Illinois for \$5,100. In a Missouri town several world's records for prices were recently broken. One sow was reported to have sold for \$1,575 and a litter of pigs under 6 months for \$3,055. The five best of the litter brought \$2,290 and the best pig of the litter sold for \$660. Just how much of this is "wind" transaction, none but the contracting parties know.

is in good trim for business, I should say neither too fat nor too lean. Fore part of the season was in stable most of the time, out on tether some, for a month or six weeks running with cows, is lively for business. What is wrong with the bull or cows? Can anything be done; if so, what? Some of the cows have been to other bulls; the results are the same."

Answer—The causes of sterility in cattle are so numerous and often so obscure that it is difficult to tell just where the trouble lies. Judging from the facts in the above letter, it is probable that the sterility is on the female side, and, in the absence of any other cause, may arise from the cows being too fat and in too plethoric a state of health. This is hinted at in the statement that "the cows were well wintered and are in good order now." It is a well-known fact that fatness is prejudicial to fecundity in cattle, leading, as it does, to fatty degeneration of the reproductive organs and permanent sterility. If the fatness is not of long standing, the sterility is only temporary, and will disappear under a change of food to a less nutritious diet coupled with an increased amount of exercise. You would therefore do well to confine your cows to a bare pasture, where they would have to

story is of stone, the top flat of wood, done by Mr. Potter and S. B. Potter. The building is 32 by 74, stone work is 8 feet high and 20 inches thick; door in east end; two rows of stock, centre passage, and 3 feet feed passage on each side in front of stock; completed with stone floors; well lighted with 8 windows; contains a harness room; hen house, 8 by 12 feet, and calf pen 8 by 16 feet. There are stalls for 30 head of cattle and 7 horses. The feed barn has nine foot sides on top of stone work, and peaked roof, and is put up with heavy frame on the style of Ontario frame barns filled in with studding and siding and No. 1 B.C. shingles. The hay is taken at the east end with the latest improved horsefork, which takes off a load in four to seven forkfuls, and carries it back 32 feet on a track into the barn. A gothic on the south side allows for a door over the plate for the straw carriers, and the west end will be filled with oat straw at the threshing. A large air shaft leads from the stable through the roof for ventilation. There is also a stone root house holding 500 bushels of roots, in the bank on the south side, with a door into the stable. Not a bad record for a man with one hand and one head.

CORRESPONDENCE.

While our columns are always open for the discussion of any relevant subject, we do not necessarily indorse the opinions of all contributors. Correspondents will kindly write on one side of the sheet only and in every case give the name—not necessarily for publication, but as a guarantee of good faith. All correspondence will be subject to revision.

Jas. Mitchell, Sr., Arrow River, wants to hear of some one who knows about the cultivation of cranberries.

Messrs. Cairns, Carnduff, send us a sample of bugs found in their wheat. They have been sent to Mr. Fletcher at Ottawa, who may be able to make them out. Such samples should be sent in cotton batting, as they get broken in transit, and then very difficult to identify.

MOLES IN GARDEN.

In reply to Wm. Wenman's question in the Nor'-West Farmer re "Moles in Garden," A. H. R. Bastien, Rocanville, favors us with the following: "As soon as I discover that a mole has entered my garden, I find his run, and dig a space of about 12 in. x 6 in. right across the run, and deep enough to be about one inch, or so below the holes. Set a rat trap, or gopher trap, opposite the hole; put a tin or piece of board over your digging and cover the whole with earth, taking care to leave the trap free from dirt. In 24 hours the mole will be in the trap. If the trap has been buried (for sometimes the mole will bury the trap and fill the space full of earth), clean the dirt again; see that the holes are clean, and reset the trap. Any moles coming in my garden do not live more than a day or two. As soon as I discover their arrival I am certain to trap them."

Walter Brydon, Neepawa, says the predators are gophers, and we strongly incline to accept his views. How many people have actually seen moles here? Mr. Brydon writes: "I saw in your last issue that W. Wenman wanted advice on mole killing, and you couldn't tell him. I was mighty glad to see that the editor of an agricultural paper is not infallible, and that there are some things he doesn't know. I have been doubtful of that same up to the present. Now, I should say to Mr. Wenman that it is pocket gophers that are bothering him, and not moles. We have lots of them out this way in the gardens, where they will eat potatoes. Beets they seem to be very fond of, and will go along a row from one end to the other, eating all the roots off, merely leaving the tops, and all other vegetables they treat the same way. They will also fill a stook of wheat to the top with dirt, and then eat the heads off. He doesn't want a mole trap. A common gopher trap will do, and a board two feet long and from 8 to 10 inches wide. Armed with these, you can go to where they have thrown up the last mound and hunt for their opening. It is not very easy to find, as they have the peculiarity of digging a hole and then drawing it in after them so effectually that it sometimes can't be found. When found, clear out the hole large enough to set your trap, place your board on top, leaving a small opening at the end of the board farthest from the trap to let daylight in. These gentry, always working in the dark, will come out to fill up their hole, and get caught; not always, either, as they have often filled the hole, trap and all, and not get caught. Pin your trap, as they are pretty strong little fellows. I have caught dozens of them in this way."

A CORRECTION.

The following was received and put in type in time for last issue of The Farmer, but was crowded out for want of space:—

Clearwater, Man., Aug. 10, 1897.

To the Editor of the Nor'-West Farmer.

Dear Sir,—I beg to correct a statement made in the last issue of the Nor'-West Farmer by Mr. Sharman, Souris. Mr. Sharman says his 2-year-old bull took first and silver medal for best bull, any age or breed, this year at Winnipeg. It is sufficient for me to say if such a prize was given, which was not, Mr. W. Sharman's Herefords would not be within a gunshot of taking it.

Yours respectfully,

Jos. Lawrence & Sons.

By reference to the prize list, which appeared on page 262, same issue, it will be seen that this animal secured silver medal for best bull, any age, in the Hereford class, and that the words "or breed" should not have appeared in descriptive matter under illustration.

GLEASON'S HORSE BOOK.

F. Obee writes The Farmer from Glenboro, under date of Sept. 22, 1897:—"Gleason's Horse Book given as a premium with your paper has reached me, for which please accept my thanks. I think it is a very valuable book for everyone handling horses. He can learn how to break and train the horse, and he can also learn (and which in my opinion is worth a great deal more) how to do this with kindness and not abuse, as I believe there are more horses poor and in bad condition through being abused than for the want of feed, or with hard work, for while you may often read to be gentle with cows, it is very seldom that you read anything about treating the horse gently to make the most out of him. So far as my experience goes, you can do more with kindness than abuse, and it is far cheaper, too."

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CONSUMPTION CURED.

An old physician, retired from practice, having had placed in his hands by an East India Missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma, and all throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send, free of charge to all who desire it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper. W. A. NOYES, 820 Powers' Block, Rochester, N. Y. 2116

Horse Owners! Use

GOMBAULT'S



Caustic Balsam

A Safe Speedy and Positive Cure

The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE-WILLIAMS CO., TORONTO, ONT. 1746

The Veterinary Association of Manitoba

Under the authority of Secs. 18, 19, 20, 22 and 26 of the Veterinary Association Act, 1890 (53 Vic., Chap. 46) the following persons ONLY are entitled to practice as Veterinary Surgeons in the Province of Manitoba or to collect fees for service rendered as such:

Atkinson, John C.	Winnipeg.
Alton, A. L.	McGregor.
Baker, G. P.	Binscarth.
Braund, F. J.	McGregor.
Coote, H. L.	Minnedosa.
Cox, S. A.	Brandon.
Dann, J.	Deloraine.
Dunbar, W. A.	Winnipeg.
Fisher, J. F.	Brandon.
Fowler, James.	Souris.
Green, Enoch.	Birtle.
Hatton, J.	Alexander.
Hinman, W. J.	Winnipeg.
Hilliard, W. A.	Minnedosa.
Hilton, Geo.	Portage la Prairie.
Hopkins, A. G.	Neepawa.
Harrison, Walter.	Glenboro.
Irwin, J. J.	Stonewall.
Little, C.	Winnipeg.
Little, M.	Pilot Mound.
Little, William.	Boissevain.
Lipsett, R. C.	Carberry.
McDonald, J. D.	Oak Lake.
McFadden, D. H.	Emerson.
McGillivray, J.	Manitou.
McKenzie, G. A.	Deloraine.
McMillan, A.	Virden.
Monteith, R. E.	Killarney.
Murray, G. P.	Winnipeg.
Reid, D. S.	Hartney.
Robinson, Peter E.	Emerson.
Rutherford, J. G.	Portage la Prairie.
Smith, H. D.	Winnipeg.
Spiers, John.	Virden.
Shoults, W. A.	Gladstone.
Smith, W. H.	Carman.
Swenerton, W.	Portage la Prairie.
Thompson, S. J.	Carberry.
Torrance, F.	Winnipeg.
Taylor, W. R.	Portage la Prairie.
Walker, John St. Clair.	Sheppardville.
Whimster, Murdo.	Hamiota.
Williamson, Arthur E.	Morris.
Young, M.	Manitou.

The practice of the veterinary profession in Manitoba by any other person is in direct contravention of the statute and renders him liable for prosecution.

1612F

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POULTRY.

The Great Canadian Hen.

I sing to the praise of the great Canadian hen.

Did ever theme so grand claim the poet's rhyming pen?

She's a layer—

She's a stayer—

And she hatches many a brood.

Oh! she hatches,

And she scratches,

And she gets them choicest food.

Yes, she picks

For her chicks

Oily grubs and worm and grain;

And she tends them,

And defends them,

And then starts to lay again.

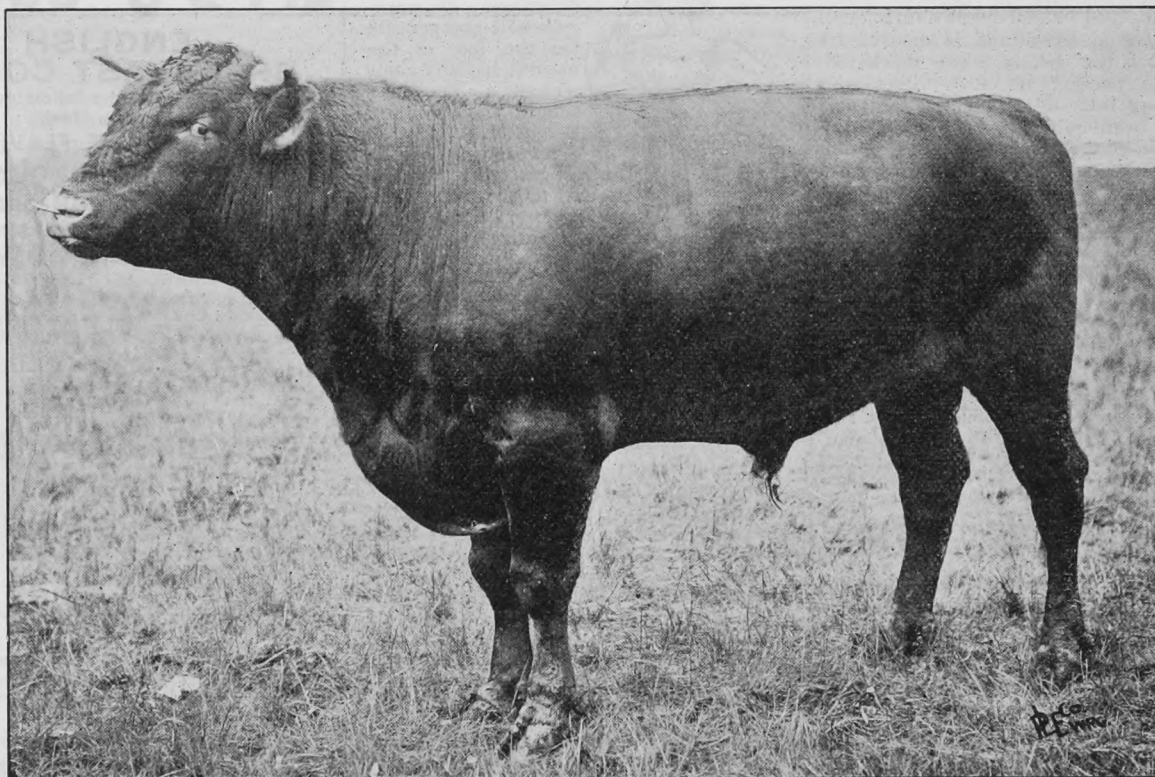
When at last she's getting stale,

The Chicken Mite.

The chicken mite (*Dermanyssus gallinae*) is by far the most formidable and difficult to exterminate of all poultry pests. It is very small, even when full grown, measuring not more than one-twenty-fifth of an inch; its color is gray, but when full fed, deep red from the blood it has extracted. It has eight legs, upon which it runs with great rapidity, and its biting jaws are very strong and sharp. It hides during the daytime, as a rule, in the cracks and crevices of the walls and floor of chicken houses, swarming out at night in myriads to torment the fowl upon the roosts. Sitting hens are an especial prey, and, as our correspondent says, are usually driven from their nests before the brood is hatched. That these mites are not absolutely dependent upon blood for their nourishment is proved by the fact that they will live for months in droppings and other filth

been added, applying thickly to the walls, ceiling, floor and nests. This will destroy all vermin and disease germs of every sort. Every poultry house should be thus thoroughly purified once or twice a year. In the meantime the droppings should be scraped up and removed every week or two and air-slacked lime be thrown in in such quantity as to fill every crack and corner with the pungent dust. It is a good plan also to kerosene the roosts occasionally. By this means only can poultry houses be kept perfectly clean and comfortable, not only for the fowls, but for the caretaker as well.

At no season is it more important to have a well-cleaned out fowl house than at present. To start into winter with a dirty house, infested with vermin, means discomfort to the poultry and heavy loss to the owner through the whole of the coming winter. Clean up now and save much future annoyance.



Two-year-old Shorthorn Bull, Aberdeen 2nd, property of Wm. Chalmers, Hayfield, Man.

Wm. Chalmers, Hayfield, Man., came from Wellington Co., Ont., in 1886, buying 320 acres of land. He began breeding Shorthorn cattle in 1890, and now has a herd of 25 head, all pure bred stock. He showed for the first time at the Winnipeg Industrial, 1896, taking 2nd prize for yearling bull; he was also a prize-winner this year on the same animal. Mr. Chalmers is determined not to stop until he has reached the top. Has completed this summer a bank barn, 44 x 64 ft. Aberdeen 2nd (21643), calved Nov. 30, 1894, bred by John Miller, Markham, Ont., got by Aberdeen imp. (13949), dam Rose Monteath 5th (24131.)

And her eggs begin to fail,
For the market they prepare her, gentle reader;

But every effort fails—

She's as thin and hard as nails—

No matter how they try to cram and feed her.

Then they fill her to the top,
And her throat they cut or chop,
And they put her on the mart,
Sure, a most dishonest part.

But the man who buys the fowl

Utters many an oath and growl;

"Why, when its crop I slit,

Lo! I found a gravel pit.

I vow this fine spring pullet

Is as tough as leaden bullet.

How the dickens

These spring chickens—

Can be tough seems quite absurd

For the butcher who did save it

For me made an affidavit

"Twas a young and tender bird."

—The Goderich Star.

of poultry houses after the chickens have been removed. During the heat of summer they multiply beyond computation, and can only be kept in check by the greatest cleanliness.

When a poultry house is found to be badly infested, the first measure is to exclude all the chickens, forcing them to roost in the open air, if possible, and placing large quantities of air-slacked lime and sulphur in the dust in which they wallow. This will soon rid the hens of any mites that may have remained on them and will also clean them of any other lice to which they are subject.

To clean the chicken house, first drench the floor and roosts with kerosene emulsion, use nearly full strength. In a few hours after this has been applied scrape the roosts, turn out and burn all the straw in the nests and have the floor thoroughly cleaned. Follow this with a coat of whitewash, in which a teaspoonful of carbolic acid to a gallon of this wash has

Improvement in Egg Preservation.

The preservation of eggs by simple cold storage has proved the most satisfactory. Various patent preservatives have been tried from time to time, but none have shown merit enough to induce any general use. Even preservation by liming, which has some advantage, is being gradually superseded by simple cold storage, as the latter method has been made more and more effective by improvements in warehouse construction and refrigerating machinery. The quality of cold storage eggs, age for age, is much better than it was five years ago, but is still irregular and open to much further improvements. As a rule, the modern storage houses are carrying goods well, but there are a good many houses where a lack of proper facilities for ventilation, temperature or the control of moisture in the holding rooms results un-

fortunately. It is probable that the present method of holding eggs in cases ready for market cannot be superseded. But it must be admitted that the carriage of stock in fillers of the usual kind is objectionable, especially when the conditions as to moisture are not the most favorable. The odorless egg case filler has reduced these objections to a minimum, but experiments have proved, we think, that the most perfect results are obtained when the eggs are carried free from contact with any foreign substance of an absorbent nature.

Some storage operators have devised methods of carrying eggs in this way which have proved the most satisfactory results. Egg-holding rooms have been furnished with crates or trays capable of holding the eggs in bulk, and so arranged as to permit turning by a simple mechanical contrivance. It has been found that eggs carried in this way, with proper regulation of temperature, may be kept sweet and sound when there is sufficient moisture in the air to prevent much evaporation and consequent shrinkage. Further material advantage is secured by the fact that the goods when marketed, are freshly packed in new fillers and cases. Some lots of eggs carried in this way have been saleable at a substantial premium above the value of the best goods marketed in the packages in which they were held. The field is a good one for further experiment.—Inland Poultry.

The combs are the thermometers by which fowls of all kinds indicate their health. When they change to a pale, dull, sickly color, better be hunting the cause.

George Wood, of the Louise Bridge poultry yards, who sent four birds to the Toronto Industrial exhibition, secured three prizes in the strongest competition of this kind ever held in Canada. This speaks well for Mr. Wood's stock, and will greatly increase his already well established reputation as a poultry breeder.

A gentleman stood upon his breakfast table two champagne glasses, and in each he placed an egg that had been intended for his morning meal. He had not bought the eggs, he had not stolen them, he did not himself keep hens, and the eggs had been neither lent nor given to him. How, then, did he get the eggs to put into the two wine-glasses? He kept ducks.

Star Pointer, the famous Chicago pacer, broke the world's harness record at Readville, Aug 28, going a mile in 1.59½, thus lowering John R. Gentry's record of 2.00½ by one and one-fourth seconds. While the two-minute horse was expected this season, no one looked for such phenomenal speed. The great Tennessee bred racer was not distressed in the least after his remarkable performance.

A Little Money Enabled a Whole Family to Dress Stylishly.

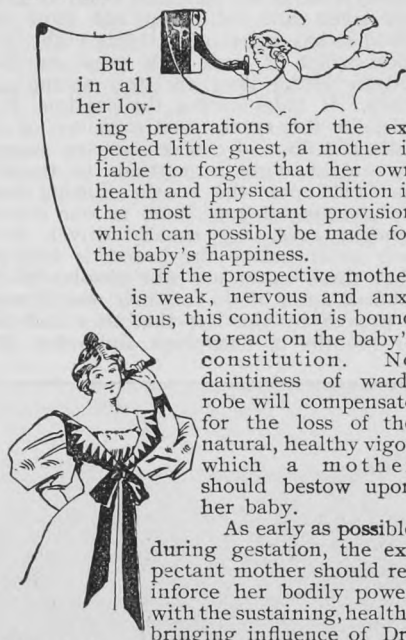
A writer in the *Ladies' Journal* says: "With a few packages of Diamond Dyes wonders can be done in making old dresses look like new. In my own family we actually did not buy a single new dress last season, yet we dressed comfortably and in style, by dyeing over clothes that had been cast aside."

Diamond Dyes color from one to ten pounds of goods, come in convenient packages, and are sold for ten cents. Perfect satisfaction guaranteed with every package when directions are followed.

Beware of imitation dyes sold for the sake of big profits; they are worthless for coloring.

THE MESSAGE OF LOVE.

There is no message which brings more gladness to a true woman's heart than the sweet assurance that a little one is coming to bless her life and call her "Mother."



Pierce's Favorite Prescription.

It gives natural, healthy vigor and elastic endurance to the organs specially concerned in motherhood. It makes the coming of baby perfectly safe and almost painless. It gives nerve-strength to the mother and vital hardihood to the child.

It is the only medicine devised by an educated physician specially to overcome all weaknesses and diseases of the feminine organs. Its sale is greater than the combined sales of all other medicines for women. This fact shows the unbounded confidence which women place in Dr. Pierce. He has been for nearly thirty years chief consulting physician of the Invalids' Hotel and Surgical Institute, of Buffalo, N. Y. During this time he has achieved a world-wide reputation for his successful treatment of the most obstinate ailments peculiar to women.

"I have taken three bottles of 'Favorite Prescription'" writes Mrs. Laura B. Chamberlain, of Estes, Pike Co., Mo. "Two before confinement, and one after. I feel that the medicine was all that saved my life. I was not able to do any work, could only sit up part of the day when I began to take it. I had only taken a few doses when I began to improve. I have a ten pound boy. Got through in a few minutes, and with but very little suffering. Baby is seven weeks old and I feel stouter and better than I have in four years. I heartily recommend Dr. Pierce's Favorite Prescription to all women in such cases."

"I can cheerfully recommend your valuable medicine, the 'Favorite Prescription' to suffering females," writes Mrs. Val Lofever, of 306 S. Division Street, Mount Vernon, Ohio. "About four years ago my health began to fail. I went to the best doctor in the city, and he said I had ulceration of the uterus. He gave me local treatment for seven months. I got better, but not well, and as soon as I stopped taking his medicine I got worse, and was not able to do anything. I felt miserable. Had such bearing down and shooting pains. My back ached so bad I could hardly sit up or lie down. So I wrote to you, and began taking Dr. Pierce's Favorite Prescription. In a week's time I began to improve and I kept on with this treatment. People commenced to make remarks about how much better I looked. I told everybody what I was taking. I had gained twelve pounds by the time I had taken the second bottle of 'Favorite Prescription.' I took five bottles and then I felt as well as I ever did in my life. Quite a number of my friends are taking your medicine. I told a lady about a month ago about the 'Favorite Pre-

scription." She took one bottle and she said she never had any medicine to do her so much good in life. She wrote to her sister and told her to get some and take it. "I cannot say enough to praise your medicine. My husband and I both thank you for what it has done for me, as we had paid out about \$60.00 for medicine and local treatment, and \$5.00 worth of your medicine has cured me."

The newly-wedded wife, above all other women, needs a good medical book. Dr. Pierce's Common Sense Medical Adviser fills this want. It contains over 1000 pages and 300 illustrations. Several chapters are devoted to the physiology of the organs distinctly feminine. Send 31 one-cent stamps, to cover cost of customs and mailing only, to the World's Dispensary Medical Association, Buffalo, N. Y., for a free copy, paper-covered. If cloth binding is wanted send 50 stamps.

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1884

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DR. BARNARDO'S HOMES.

The managers of these institutions invite applications from farmers and others for boys and youths who are being sent out periodically, after careful training in English homes. The older boys remain for a period of one year at the Farm Home at Russell, during which time they receive practical instruction in general farm work before being placed in situations. Boys from eleven to thirteen are placed from the recently established distributing home in Winnipeg. Applications for younger boys should be addressed to the Resident Superintendent—115 Pacific Avenue, Winnipeg,—and for older boys, possessing experience in farm work, to Mr. E. A. Struthers, manager Dr. Barnardo's Farm Home, Russell, Man. [1927]

When writing advertisers, mention The Farmer

DAIRY.

The Dairy and its Influence on the Character of the People.

It is a well-known fact that our surroundings, to a very large extent, shape our character and decide our destiny. The child born in the gutter will always wallow in the mire, and the one raised in a neat and tidy home will always have a liking for that which is neat, tidy, and healthy. A man or woman raised like that will be a better servant, a better master, and a better fellowman, better and happier for himself, and will make those he comes in contact with better and happier for having associated with him. A clean, neat home and plenty of good, substantial food will go very far towards making a home happy, and happy homes are what make people feel kind to all the world and good-tempered and loving to those near them.

It is doubtful if there is any other industry which will exert such an influence for good over the people as the home dairy. It will promote and encourage cleanliness by showing people how pleasant, healthy, and necessary it is to have everything neat and clean; it will promote good health by giving an abund-

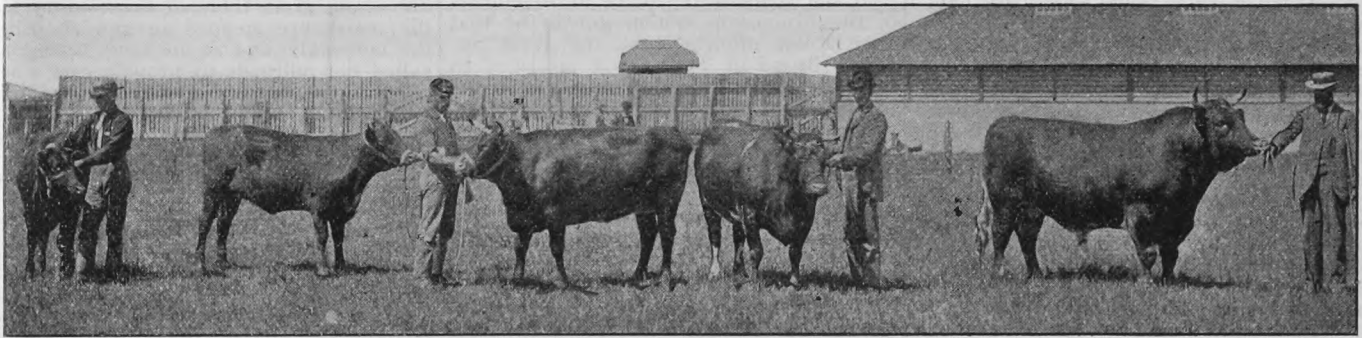
There are a few things that the dairy—I mean the well-kept dairy—will teach you and yours, and they are cleanliness, punctuality, and industry, and those qualities are essential to health and happiness and the general welfare of people. All this is irrespective of the pecuniary advantage that the well-kept dairy has over the poorly-kept, and surely those reasons are weightier than the money to be saved by letting things go as they probably do now, in a slovenly, haphazard fashion.

You may doubt that you can make money by having and keeping a first-class dairy, but you cannot doubt the great influence for good it will exert over yourself, your wife, and your children. Then as to the pecuniary advantage to be gained, how can you doubt it will pay when you consider the fact that it costs from 20 to 50 per cent. more to produce a pound of the despised trade butter than sweet, wholesome butter, which will sell for twice the price of the other stuff, which for that matter often will not sell at any price,—which again impresses on yourself and your children the conviction that it is no use, you might as well take care and be more slovenly, as the butter will not sell anyway, and that lesson you give your children to carry through life. Can any good come of it? It is hard to see how, and still thousands of farmers persist in carrying on their dairy business in the

Aug. 21, the total shipment of Canadian creamery butter from Montreal was 72,854 packages, while the total shipments for the same period last year were only 59,584 packages, an increase of over 13,000 packages.

Buttermilk.

A well known medical journal draws attention to the medicinal uses of buttermilk. This conviction has already a firm hold of the popular mind. The writer says:—"Long experience has demonstrated it to be an agent of superior digestibility. It is indeed a true milk peptone; that is, milk already partially digested, the coagulation of the coagulable portion being loose and flaky, and not of that firm, indigestible nature, which is the result of the action of the gastric juices upon sweet cow's milk. It is a decided laxative, a fact which must be borne in mind in the treatment of typhoid fever, and which may be turned to advantage in the treatment of habitual constipation. It is a diuretic, and may be used to advantage in some kidney troubles. It resembles Koumiss in its nature, and, with the exception of that article, it is the most grateful, refreshing and digestible of the products of milk. It is invaluable in the treatment of diabetes, either ex-



Shorthorn Herd, owned by John G. Barron, Carberry, Man.

This herd has at its head the very fine bull, Topsman (17847), dark red, bred by J. Russell. He got 1st for bull 4 years or over, silver medal for bull any age, 1st for Christie & Fares' special prize, 1st for Dominion Shorthorn Breeders' Association special prize for bull any age, and 2nd for bull and two of his get, at the 1897 Winnipeg Industrial. The herd, composed of May Queen 2nd, Nonpareil Beauty 2nd, and Red Baroness, captured the red ticket for bull and three females, any age, owned by one exhibitor, females bred in Manitoba or N. W. T. Mr. Barron is the representative of the Pure Bred Cattle Breeders' Association on the Winnipeg Industrial Exhibition Board.

ance of the best and most nourishing food. And, lastly, it will stimulate the growth of your character in the right direction, by teaching you to be industrious and punctual. Did you ever stop to think how important it is that those qualities should be developed in your children? If not, do so now, give the subject some consideration. Did you ever notice those bright little home dairies where the daughter of the home takes pride in keeping everything neat and tidy? Did you ever notice that in such a home not only the dairy, but also the sitting room and the kitchen, is kept neat and clean, and an air of satisfaction and prosperity pervades such homes? Have you ever thought what difference it will make in your children if they are brought up in a home where a slovenly, ill-kept, non-paying dairy supplies you with poor butter and sour cream for the table, and butter of questionable value, or sometimes no value at all, to barter away for stale groceries that your grocer cannot sell otherwise, or if they are brought up in a home with a neat, tidy, profitable dairy, where the product is sold for good cash, and the table of the house is supplied with choice butter and sweet cream? Have you ever thought what a difference it will make to your children, and what different men and women they will make if brought up in one or the other of those homes?

same old way in spite of the benefit it would be to change. Not only a benefit to themselves and their families morally, but also financially.—Chas. Williams, in "The Little Buttermaker."

Dairy Reports.

I. W. Wheaton, secretary of the Eastern Dairy Association, writing to Hoard's Dairyman, says:—

The total shipments of cheese this season, up to the week ending August 21, were 1,056,811 boxes. While the total shipments for the same period last year amounted to 840,848 boxes, showing the large increase of over 215,000 boxes. The total value of this year's exports for the same time is estimated to be \$6,250,000, as against \$4,250,000 for the same period last year, an increase of \$2,000,000 over last year. This is no small amount to be divided among the dairymen of our country, and may have considerable to do in promoting the good times that seem in reality to have overtaken the Canadian farmer. The season's production is very little more than half over. It has been felt all along that the largely increased output of cheese this year would tend to lessen our export trade in butter. However, the very opposite has been the result. Up to the end of the week ending

tensively or alternately with skim milk. In some cases of gastric ulcer and cancer of the stomach, it is the only food that can be retained."

A cow may keep fat enough for beef and yet be a good milker; this, however, is the exception, not the rule.

It is more profitable to keep a cow warm by means of a comfortable stable than by an extra amount of feed.

Don't milk the udder out clean until the fourth day after calving. This will often prevent a chill, which often produces milk fever.

A poor cow in the dairy is like a dull tool in a carpenter's hands—requires the expenditure of a large percentage of energy to obtain a small percentage of result.

A clean stable makes a clean cow, a clean cow clean milk, clean milk clean butter, and the result of this combination is a clean profit. The proof of this rule is in the practice. Try it.

If that inspired prophet who said "cleanliness is next to godliness" could look into some cow stables he would not think there was much show of their owners ever getting very near to godliness.

Skimmings.

"Kind words can never die." If you don't believe it, try it on your dairy cows and you will prove the truth of it in the uniform and generous yield of milk and never-failing profit they will return you.

A poor feeder of a good cow, or a good feeder of a poor cow, it matters not which, are poverty breeders, and show a lack of good business ability. The sooner one finds this out and profits thereby the sooner he will cease to keep cows at a loss.

The output of the Edmonton creamery has averaged 1,600 pounds a week, or about 25,000 pounds since the season opened. This equals \$2,500 to the patrons on first payment, with a prospect of from \$1,200 to \$2,000 more at the end of the season.

The Manitou creamery had made 31,000 lbs. of butter when it closed down for the season. The price paid patrons was 12 cents a pound. The patrons who got over \$100 in the season were: Thomas Crozier, \$156.06; Wm. Story, \$148.60; Ben Swanson, \$137.17; John Davidson, \$123.08; J. Moorehead, \$108.90; Thos. Nairn, \$104.56.

In looking for a dairy bull, try to find one, whether a calf or full grown must depend on your circumstances. He should be "rich as your purse can buy," but let that richness consist in wealth of milking blood. The sire must come from a rich, heavy-milking dam, and the dam be favored with the same kind of ancestors. If his pedigree is good, then see that he is well grown and not stunted or too small for his age. If you are buying a full grown bull, which would be best if you could afford it, then see what quality of offspring he has begotten. This, of course, is the main point in view. It does not matter how good his pedigree may be, if his performance comes to nothing he must be discarded.

The Alberta Plaindealer says, in its Bowden correspondence: "For the month of July, Mr. S. Eagles realized 192.63 lbs. from six cows, one of which was almost dry. The butter was manufactured by the White Swan creamery, for which Mr. Eagles received 14c. per lb., thereby making for the month a total of \$26.96, or an average of \$4.49. Mr. Wm. J. Dunlap sends his cream to the same factory, and for one year his cows averaged \$30. Mr. Dunlap was offered \$10 per head for the calves, but they will sell for more. From this we see that this man has made \$40 per head out of his cows for one year. Of course every farmer does not make as much, for these two gentlemen take extra good care of their cows, and these figures should encourage others to do likewise.

The public are often very unjust but never consciously so. What they see clearly to be justice they always approve. It often takes a long time to bring them to see things as they really are, but in the end their verdict is always right. It was faith in this idea which induced the manufacturers of the T. & B. tobacco to stand by their superior brand under every discouragement at the outset. The public verdict has been rendered at last, and it is emphatically in their favor.

For Over Fifty Years

MRS. WINSLOW'S SOOTHING SYRUP has been used for over fifty years by millions of mothers for their children while teething, with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for Diarrhoea. It will relieve the poor little sufferer immediately. Sold by Druggists in every part of the world. Twenty-five cents a bottle. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind.

1840

Wheat Inspection in Minnesota.

Now that there is some prospect of the government at Ottawa being stirred up to make some enquiry into the working of the system of purchasing, handling, transport and storage of the grain products of Northwestern Canada, it must be of practical interest to every grain grower to learn something of the possible modes and lines along which a more satisfactory set of rules and provisions bearing on the case can be formulated and afterwards maintained in working practice. Fortunately for us such information can be had in the States next door to us. The information they are able to supply us is not theoretical, but cut and dry, the ripe fruit of a dozen years daily test, and on a scale that dwarfs our most ambitious pretensions. The Minnesota system was inaugurated as far back as the beginning of 1885, and has been gradually perfected till now the immense wheat trade of the three great northwestern spring wheat States is done with ease and speed, and with a minimum of friction. The whole business is done under the laws of the State of Minnesota, which, by analogous legislation of the two Dakotas, practically governs the whole. When the town of West Superior was organized, an attempt was shortly afterwards made to create a separate system of inspection under the laws of Wisconsin, in which that town is situated, but so perfect had the arrangements of the Minnesota system got to be that after a few months' trial, the West Superior Board of Trade took measures to have the inspection once more put in the hands of the Minnesota State inspectors, where it has remained ever since to the satisfaction of all parties interested. There are four points of inspection, Duluth, Minneapolis, St. Cloud and St. Paul. The two last do business on a comparatively small scale. The returns for the 1895 crop, the last year reported on, show that up to Aug. 31, 1896, 116,494 cars of wheat were inspected at Minneapolis; 93,106 at Duluth; 155 at St. Paul, and 1,030 at St. Cloud. Over 40,000 cars of coarse grains were inspected within the same period. The inspection is under a specially constituted board, the State Railroad and Warehouse Commission. The officials now in the employ of the inspection department are all specially trained, gradually working their way up. Provision is made for dealing promptly and fairly with every difficulty and a special officer, Mr. R. C. Burdick, at one time chief grain inspector, has the control of every country elevator. His duties are to see that all country elevators on the right of way of railroads at interior points which come within the purview of the law are duly licensed and operated in accordance with its requirements and provisions. In the discharge of such duties he spends a portion of his time visiting country elevators, observing their methods, comparing grades and dockages with those at terminal points and investigating causes of specific complaint which may have been formally lodged with the railroad and warehouse commission. The result is seen in a closer conformity by country buyers to the standards in force at terminal points, and generally improved methods. The relations between the farmer and the country buyer are characterized by an absence of much of the antagonism and suspicion which formerly existed. Whenever any doubt exists as to the proper grade of any lot of grain at country points, either or both parties interested are at liberty to submit a sample of the grain to the chief inspector at St. Paul, who determines what such grain would grade at terminal points, and who thus acts as an arbiter or adviser in the settlement of disputes at country stations. During the past season many controver-

sies have been adjusted by this method. The total number of country elevators and warehouses in this State at present operating under the law is 1,133. In connection with this branch of the service, and in accordance with the requirements of chapter 30, Laws of 1893, there are constantly kept on file for public inspection market journals showing prices of grain and farm products in Liverpool, London, New York, Buffalo, San Francisco, Minneapolis and Duluth. Weekly bulletins are issued and published in leading Northwestern papers showing the prices paid in the different markets, also the rates of freight by lake, rail, or ocean, and all other charges which would attach to shipments from the Northwestern markets to the seaboard and abroad.

The warehouses over which the inspection system spreads its operations are divided into public and private. A public warehouse is one duly bonded, licensed and operating under the provisions of the law. All such are subjected to rigid inspection, calculated all through to ensure as far as possible fair dealing and the prevention of irregular transactions. A private warehouse must apply for inspection, and if found suitable will be dealt with so as to give every freedom in the transaction of legitimate business.

It may be mentioned here that at one time, under pleas similar to those now put forth in the interests of the elevator owners in Manitoba, these concerns "run" the whole grain trade of the country, but the legislature stepped in and abolished the monopoly and at the same time compelled the railroads to provide cars when required by farmers, and platforms from which grain could be loaded. The railroads, as common carriers, were thus compelled to deal with every customer, great and small, on exactly the same terms.

Inspection in and out.

Reference has been made in our editorial columns to the system of grading in and out at Fort William. This is strictly prohibited by the State law of Minnesota, and maintained by Mr. Clausen, their chief inspector, to be very injurious to the best interests of the country. There is over there one way by which to meet the call for lower quotations on the part of foreign buyers, wheat can be sold off grade. The buyer asks for quotations on regular grades, but wants a still lower cut. The dealer can still supply him a sample of "Duluth hard," made up of grades that meet his views as to price. On page 345 is given a copy of the certificate on which every bushel shipped out is recorded. In addition to the detailed statement, there is, if needed, a statement where the several lots are placed in the ship's hold. "Front hold," "midships," "aft," "mixed on board," are the distinctions made use of.

In this connection it is interesting to review the defence of the Port Arthur system of grading in and out, made last year when the question was made the subject of free criticism.

In the Canadian Miller, published at Toronto, dated the 2nd November, 1896, and on page 691 is the following: "I have a letter before me, addressed by J. C. Truesdell & Co., New York, who handled some 5,000,000 bushels of last year's crop, in which the following passage occurs:—'The quality of your No. 1 hard has been fully equal to Duluth inspection. In our sales to Europe the Manitoba inspection has, in some cases, been given the preference,'—and again on page 693, 'The new crop of Duluth wheat does not appear to suit anyone. It has always had an unusually weedy smell, independent of the musty or smutty condition of which com-

plaint is made. The wheat presents a much inferior appearance to that which is passing through here from Port Arthur, which is as bright as a dollar, and very plump,—and again on page 713, 'In British markets there is not the same difference, and sometimes the premium is in favor of Manitoba grades as compared with Duluth.'"

A Winnipeg grain dealer wrote at the same time as follows:—

"According to a letter I have received from a large and reputable firm in Liverpool, the difference in the price of the two

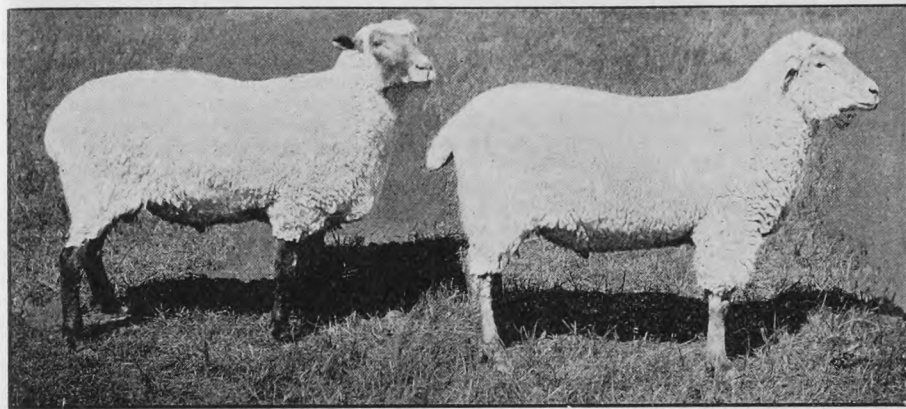
Inspection, Warehousing and Delivery in Minnesota.

The rules and regulations for the department of grain inspection at warehouses and terminal elevators, warehousing and delivery, etc., which, after careful consideration, came into force on July 15, 1895, number 66 in all, of which as specimens may be given Rule 19 on car inspection, and Rule 27, dealing with the inspection of uncleaned wheat. There are

inspector, if cleaned in a public warehouse under state supervision. Provided, however, if said wheat contains such an excess of dirt or foul seed, that the inspector cannot correctly adjudge the amount thereof, he shall determine by actual test with suitable appliances, the average amount of such dirt or foul seed per bushel that it will be necessary to deduct for properly cleaning such wheat to the grade fixed upon it by him, and when such deduction has been determined, it shall be plainly stated upon the inspection ticket. After the waste in any lot of grain has been determined, each public warehouseman shall be held responsible to clean such grain under State supervision and make it fit and suitable for the grade fixed upon it by the said track inspector. Nothing in the within rule shall deprive any interested party of the privilege of ordering the grain into a public warehouse, and causing the actual waste to be ascertained, and in no case shall the cleaning machinery be run in a different manner than while in ordinary use, either by speed, feed or draft; and in case parties so desire, the actual dirt taken out of said grain shall be saved and weighed on a platform scale, to be kept by each public elevator or warehouse for that purpose, allowing a fair per cent. for waste passing through the blow spout. The owner, or agent of the owner, of any lot of grain so ordered cleaned, shall have full and free access to such lot of grain during the process of such cleaning. The grain shall be weighed before and after such cleaning by a state weighman. The result of such cleaning shall be final and binding upon all parties. The charges for cleaning wheat in a public elevator or warehouse shall not exceed one-half cent per bushel.

The whole system from start to finish is solely in furtherance of straight business, and the satisfaction with which it is regarded by all parties interested is the best proof of its value.

The Minnesota system is recognized as



Fat Wethers, property of R. S. Preston, Pilot Mound, Man.

The sheep shown in above illustration took 1st prize at Winnipeg Industrial Exhibition, 1897, fat wethers, two shears or over; and were shown by R. S. Preston, Pilot Mound, Man.

wheats don't exceed 1½d. to 3d. in favor of the Duluth grade, and it has not yet been proved whether or not the difference is the result of the irregularity of the grading. I consider the contentions made by dealers in Manitoba quite correct, and as long as no complaint criticizing the work of the inspector has been made, there should be no interference."

Messrs. Truesdell & Co. are pretty big fish, and their opinion is of corresponding importance. Last month when contending for the fairness of the price then being paid farmers, as instanced by the local figures on Sept. 3, it was pointed out that Duluth regular was in reality the best grade of Northern, which corresponds to a good No. 2 hard here. When this fact is kept in view, we find that the best case that firm could make in defence of Port Arthur inspection was that our No. 1 hard was fully equal to No. 1 Northern, Duluth inspection..

"In British markets the premium is sometimes in favor of Manitoba grades, compared with Duluth." And the Winnipeg dealer shows that at Liverpool the difference in price does not exceed from 3 to 6 cents in favor of Duluth grades.

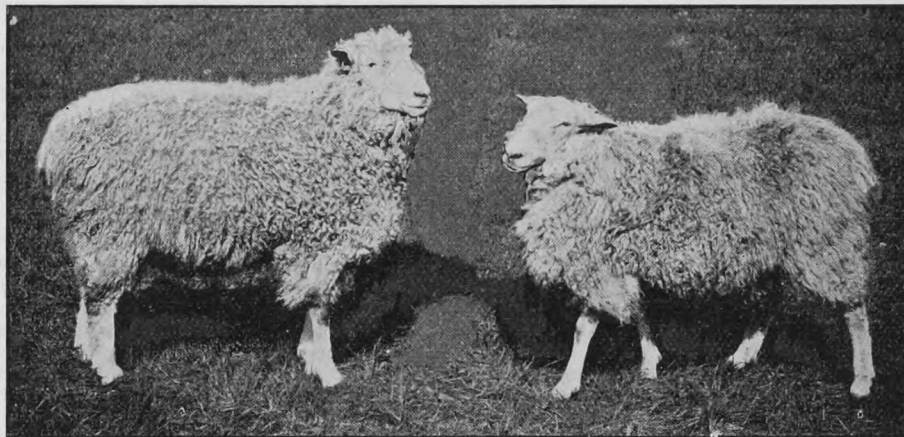
Now, it so happens that at the very time these statements were made on behalf of the re-graded (should we not rather say "degraded" wheat of Fort William inspection, the wheat in the No. 1 hard bin at Fort William weighed 62½ lbs. of first-rate milling quality. The testimony about the weedy smell of Duluth wheat is easily understood. It had been threshed from the stook, therefore not sweated properly, and it is no great testimony in favor of the system we oppose if the bright wheat of Manitoba can only make an equal figure on the world's market with wheat a grade lower, and occasionally grown worse on the road because of improper handling on the harvest field.

What Hood's Sarsaparilla has done for others it will also do for you. Hood's Sarsaparilla cures all blood diseases.

Those unhappy persons who suffer from nervousness and dyspepsia should use Carter's Little Nerve Pills, which are made expressly for sleepless, nervous, dyspeptic sufferers. Price 25 cents.

further rules dealing with grain in private warehouses.

Rule 19. Each inspector must be particular that all inspection tickets placed by him upon cars on his track are plainly written. No alteration or erasure must occur upon the tickets. In case of an error he shall make out a new ticket, carefully destroying the old one. This ticket must contain: First, date of inspection; second, number and initial letters of the



Lincoln Ewe and Ram, property of Wm. T. Lytle, Beaconsfield, Man.

Wm. T. Lytle, Beaconsfield, Man., took every available prize offered for Lincoln sheep at the Winnipeg Industrial Exhibition, 1897. He has a fine lot of sheep and understands his business. The Ewe, Twilight (889) shown in above illustration, was bred by D. A. Campbell, Mayfair, Ont.; dropped April 10, 1893. The Ram, Sir Paddy (1861) was bred by Gibson & Walker, Ilderton; dropped spring, 1893.

car; third, the grade of grain in that car; fourth, the amount of shrinkage per bushel, if uncleaned; fifth, the test weight of the measured bushel of grain; sixth, the name of the inspector. Each inspector must personally fill out and sign each ticket.

Rule 27.—In inspecting wheat that has not been properly cleaned the track inspector shall determine and shall state upon his inspection ticket the number of pounds per bushel, or fraction thereof, that in his judgment will be a just and proper allowance for cleaning the same wheat to the grade fixed upon it by said

the best equipped in the United States, and it has served as a model for newly established systems in other States. The inspection, weighing and registration departments are integral parts of a complete whole, and serve not only as a check upon each other, but upon the transactions of the public warehouseman. In view of this fact, receipts issued from the terminal public warehouses of Minnesota are regarded as the very best and safest form of collateral by local and Eastern banks and moneyed institutions, and advances are made upon this security below normal rates of interest.

RULES AND REGULATIONS

For the Government and
Control ofPUBLIC COUNTRY ELEVATORS
AND WAREHOUSESIn the
STATE OF MINNESOTA.

State of Minnesota,

Office of Railroad and Warehouse Com-
mission, St. Paul, June 13th, 1896.

The following are the Rules and Regulations established by the Railroad and Warehouse Commission in compliance with Chapter 140, General Laws of 1895, entitled "An Act to regulate the receipt, storage and shipment of grain at elevators and warehouses on the right of way of railroads, depot grounds and other lands used in connection with such line of railway in the State of Minnesota, at stations and sidings other than terminal points," approved April 16th, 1895, the same to take effect and be in force on and after the first day of August, 1895.

W. M. LIGGETT,
GEORGE L. BECKER,
IRA B. MILLS,
Commissioners.

R. C. BURDICK,
Supervisor of Country Elevators, St. Paul,
Minnesota.

A. C. CLAUSEN,
Chief Inspector of Grain, St. Paul, Minn.

All elevators and warehouses on the right of way of any railroad or on depot grounds or other lands used in connection with such line of railway, at any station or siding in this State, in which grain is received, shipped, stored or handled, are designated by law as public elevators or warehouses, under the supervision of the Railroad and Warehouse Commission of the State of Minnesota.

It is unlawful to receive, store, ship or handle grain in such elevator or warehouse unless the owner or owners thereof shall have procured a license therefor from said Commission.

Blank applications for license will be furnished by the Commission upon request, which application must be duly filled out, signed and sworn to, and forwarded to said Commission by the owners or lessees of such elevators or warehouses, or, in case of a corporation, by its proper officers, and accompanied by a fee of one dollar. Such license, together with the rules and regulations established by the Commission, shall be posted in a conspicuous place in the office of each of said elevators or warehouses for the free inspection of the public. Every such license shall expire on the thirty-first day of August of each year.

Rule 1. The party operating such elevator or warehouse shall keep a true and correct account of all grain received into such elevator or warehouse, showing the date of its receipt, the grade, gross weight, tare and net weight of each lot of grain received, and a similar account of all grain shipped from said elevator or warehouse, showing the date of shipment, number and initials of car, also the grade and the gross and net weight, as returned by the State inspection and weighing department.

Rule 2. If grain is received into such elevator or warehouse for storage or shipment, a warehouse receipt must in all cases be issued for each separate lot of grain so received. Such receipt shall show upon its face the name of the owner, the date the grain was received, the grade, gross weight, tare and net weight of each lot of grain mentioned in said receipt. Such receipt shall also contain on its face a schedule of the charges established by the Commission for receiving, handling, storing and delivering grain.

Rule 3. Upon surrender of warehouse receipts of the same grade in not less than carload lots, and upon payment of all lawful charges which may have accrued thereon, said grain, or grain of same grade and net quantity, is deliverable in not less than carload lots, except as hereinafter provided, to said owner or his order upon demand, either from the elevator or warehouse where it was originally received, or, if the owner so decides, upon track at St. Paul, Minneapolis, St. Cloud or Duluth, subject to official inspection and weight. Said grain shall not be subject to any further charges for storage after demand for such delivery has been made and cars furnished. The warehouseman shall be held liable for any negligence or improper delay in ordering cars and delivering said grain.

Rule 4. If the owner demands his grain from the elevator or warehouse where it was originally received, he shall be entitled to receive it in such lots or quantities as he may desire and to which he may be entitled, and the delivery of such grain so made and accepted shall be held to be a final and legal delivery.

Rule 5. If delivery is demanded by the owner on track at either St. Paul, Minneapolis, St. Cloud or Duluth, said grain shall be held to be in possession of said warehouseman until the grade and dockage on such grain has been finally established by the State Inspection Department at such point, when it may be delivered to the owner or his order. The said owner shall not be held responsible for any switching or other charges which may accrue upon said grain before its delivery to him at terminal point, except the charge for inspection and the charges for freight on gross weight from the point where the original receipts were issued to the terminal point where the delivery is made.

Rule 6. The warehouseman shall be held liable to the owner for the delivery of the kind, grade and net quantity called for by said receipts, less an allowance not to exceed sixty (60) pounds per carload for shrinkage or loss in transit, if such shrinkage or loss occurs.

Rule 7. Warehouse receipts shall not be issued for a greater quantity of grain than was contained in the lot or parcel stated to have been received, nor shall they contain any language in anywise limiting or modifying the liability of the party issuing the same as imposed by the laws of this State.

Rule 8. The charge for receiving grain, insuring, handling and storing the same fifteen days and delivering shall be two cents per bushel. Storage charges after the first fifteen days, one-half cent per bushel for each fifteen days or part thereof for the first three months; for storage after the first three months charges shall not exceed one-half cent per bushel for each thirty days or part thereof.

Rule 9. The term "grain" is held to signify and include the following products: Wheat, corn, oats, rye, barley and flaxseed.

Rule 10. The following form of warehouse storage receipts is established by the Commission as the proper form to be adopted by the owners of public country elevators and warehouses:—

..... Elevator.
No. Minn., 189
Received in store of
..... bushels No. Wheat
which amount and same quality by grade
will be delivered to the owner of this receipt, or his order, as provided by law and the rules of the Railroad and Warehouse Commission of Minnesota, upon surrender thereof and payment of lawful charges.

The established maximum rates and charges for receiving grain, insuring, hand-

ling and storing same fifteen days and delivering is 2 cents per bushel.

Storage after the first fifteen days, one-half cent per bushel for each fifteen days or part thereof for the first three months; after the first three months, one-half cent per bushel for each thirty days or part thereof. If grain is cleaned at owner's request, one-half cent extra per bushel.

This grain is insured for benefit of the owner.

.....bu.....lbs., gross
.....bu.....lbs., dockage.
.....bu.....lbs., net.

..... Owners or Lessees.

By Agent.

Rule 11. If any dispute or disagreement arises between the party receiving and the party delivering grain at any country elevator or warehouse in this State as to the proper grade or dockage, or both, of any grain, in accordance with standards at terminal points, an average sample of at least three quarts of said grain in dispute may be taken by either or both of the parties interested and forwarded, in a suitable sack, express charges prepaid, with the names and address of the parties, to the Chief Inspector, St. Paul, who will, upon request, examine said grain, and adjudge what grade or dockage said sample of grain is, in his judgment and opinion, properly entitled to under State inspection rules, and would receive if shipped in carload lots to the terminal points and subjected to official inspection. If the grain in question is damp, musty or otherwise out of condition, this fact, with any other necessary information, must accompany sample. No samples will be accepted unless express charges are prepaid.

Rule 12. Complaints of fraud or oppression on the part of any person, firm or corporation operating such country elevator or warehouse will be investigated by the Commission, upon written complaint, duly sworn to, with proper presentation of the facts by any person aggrieved.

Rule 13. All persons, firms or corporations owning or operating such licensed country elevators or warehouses shall, at any and all times when requested by the Commission, promptly render and furnish a report and itemized statement, under oath, and upon suitable blanks to be furnished by said Commission, showing the amount, kind and grade of grain received into such elevator or warehouse, and the amount, kind and grade shipped therefrom, together with the dockage taken and that received, and such other facts regarding the nature and condition of such business as may be deemed necessary by the Commission.

It is unlawful for any person, firm or corporation operating any such elevator or warehouse to enter into any agreement, contract or combination with any other person, firm or corporation operating any similar elevator or warehouse for the pooling of the earnings or business of their respective elevators or warehouses, so as to divide any portion of the earnings or business thereof. Any person attempting to operate any elevator or warehouse herein described without a license, and any so licensed warehouseman who violates the provisions of law as herein specified is guilty of misdemeanor, and on conviction thereof is subject to a fine of not less than fifty (\$50) dollars, nor more than one hundred (\$100) dollars.

Any person may obtain a printed copy of the foregoing rules and regulations by applying to the Railroad and Warehouse Commission, St. Paul, Minn.

MINNESOTA GRADES.

No. 1 Hard Spring Wheat—No. 1 Hard Spring Wheat must be sound, bright and well cleaned, and must be composed most-

ly of Hard Scotch Fife, and weigh not less than fifty-eight pounds to the measured bushel.

No. 1 Northern Spring Wheat—No. 1 Northern Spring Wheat must be sound and well cleaned, and must be composed of the hard and soft varieties of spring wheat. Note.—It is to be understood that the minimum test weight of this grade shall be not less than fifty-seven pounds to the measured bushel, and must contain not less than about fifty per cent. of the hard varieties of spring wheat.

No. 2 Northern Spring Wheat—No. 2 Northern Spring Wheat must be sound, reasonably cleaned, and of good milling quality. This grade to include all wheat not suitable for the higher grades, and to weigh not less than fifty-six pounds to the measured bushel.

No. 3 Spring Wheat—No. 3 Spring Wheat shall comprise all inferior, shrunken or dirty spring wheat, weighing not less than fifty-four pounds to the measured bushel.

Rejected Spring Wheat—Rejected Spring Wheat shall include all spring wheat that is grown, badly bleached, or for any cause unfit for No. 3 wheat. Note.—Wheat containing any admixture of "rice" or "goose" wheat will in no case be graded higher than rejected.

This year, we believe, at the suggestion of Chief Inspector Clausen, the Minnesota Railroad and Warehouse Commission has adopted a rule which will be the means of admitting much wheat to No. 2 and No. 3 that otherwise would be placed in a lower grade. The rule is as follows:—

"Hard, flinty wheat of good color containing no appreciable quantity of soft wheat, will be admitted in the grades of No. 2 Northern, and No. 3 wheat, provided the test weight of the same is no more than one pound less than the required test weight of said grades, and provided that in all other respects said wheat is qualified for admission in said grades."

The justification for this temporary deviation from grades that have for years been practically permanent is that owing to the peculiar climatic conditions before harvest, grain which is somewhat shrunken, but inspecting No. 2, is making a stronger flour, and one which is, by many, pronounced better than that produced from the large and starchy kernels of previous late years.

In other words, the grading adopted by Mr. Clausen is in conformity with milling experience and in entire accord with the contention made by The Farmer a year ago, that weight by itself is not the principal factor in determining the milling value of wheat. Fat kernels mean excess of starch, and small grains, or even, as in the case of South Dakota this year, grain checked by hot winds from filling out as they would naturally do, are actually fit to make stronger flour than grains that have grown plump and nice to look at, and weigh pounds more to the bushel.

J. J. Hill on Wheat.

In last month's Nor'-West Farmer attention was drawn to the Farmers' Congress at St. Paul, Minn., where 500 delegates were present. J. J. Hill is the greatest railroad figure in the Northwest, and his address at one session is well worth quoting from:

"I am glad to attend all occasions of this kind and observe the interest taken in the one occupation that furnishes the bone and sinew of the land. One-half the people and nearly one-half the capital of the nation are engaged in agricultural pursuits. We are all interested in seeing prosperity come to those who cultivate the land. To show you the development

that has taken place in the Northwest, let me recite you some figures. For eighteen years I have been at the head of a system of railway running through the Northwest. In 1879, when I first took charge of that system, we hauled to market 2,185,000 bushels of wheat. During the years 1895-96 the figures were 68,000,000 bushels. This comparison represents the development of the Northwestern country in these fifteen years. But this growth has not been limited to the Northwest. There has been great development along agricultural lines everywhere. The world has advanced more in this respect in the last 100 years than in the 500 years preceding. Only 150 years ago there were no tame grasses grown, and less far back than that the people of New England were eating bread made of a mixture of rye and corn meal. Now wheat is the favorite food of almost every race on the globe."

"Some years ago, at the time of the rapid increase of wheat production in India, I sent a man to that country and kept him there a whole year studying the conditions of wheat production. I wanted to know what would be the results of the increased production of that country on the markets of the world, and especially in its bearing on our own business. His report was that in the long run the improved methods in this country would enable us to compete successfully with the

son, I am sure they would get 8 or 10 cents a bushel more for their wheat than if they rush it to market all at once. If the farmers would build granaries and hold their wheat, a single crop would pay the cost of building them. Farmers need have no fear about holding their crops this year. So let them spend their time now in getting their land into shape for the next season's crop instead of threshing their wheat right away and rushing it into market."

"A word as to the cost of transportation. The average cost per ton for each ten miles is 80 cents. In England it is \$2.34, in France \$2.10, in Austria the same, in Russia \$1.80, in Germany \$1.92. So with intelligent farming the farmers of the United States need have no fear that they cannot successfully compete in wheat raising with any nation on the globe.

"It is certain that in the years to come the quantity of grain is going to be increased. Every farmer must realize this fact and waste no time or energy. We cannot use all our farm products at home, no matter how great our market. We must, therefore, have an outlet for our surplus products. The price of all is determined by the price paid for the surplus. This is a thing that we may in a measure ameliorate, but we cannot control it."

Looking all over the world for openings



Chester White Sow and Litter, property of R. S. Preston, Pilot Mound, Man.

The Sow, Dina (774), farrowed April 7, 1895, bred by R. S. Preston, Pilot Mound, Man., took first prize at Winnipeg in 1895 for sow under six months; 1st in 1896 for aged sow, and diploma for sow any age; 1st in 1897 for sow and litter.

Indian farmers. Argentine is a large country and a great wheat growing country, but we may reasonably expect that with the greater intelligence of our farmers and our better methods we can maintain our present superiority over that country and the whole world.

"A great factor in this education of the farmers along intelligent lines of effort are the agricultural schools. They have been doing a splendid work, and they can do much more. In order that the farmers get the full benefit they should demand that the training at those schools should be thorough and practical. I have assisted in every way possible to obtain for the school of this state a wider appreciation among the farmers. We made a practice of bringing the farmers along our lines down there free. After the snow covered the ground and the legislature was in session we found that many of the farmers were using the opportunity to hear the speeches there instead of visiting the school, and we shut down on the privilege."

"I think wheat is going to bring better prices this year than for two years past. But I do not believe the era of high prices will be of long duration. With increased production dollar wheat will come occasionally, but it won't stay long. If the farmers would stack their wheat securely and then go ahead with their fall plowing, marketing at their leisure later in the sea-

for the sale of wheat, Mr. Hill fixed his attention on China.

"The question with me was, could we get the people of China to displace some of their rice for our wheat? I interviewed many intelligent Chinamen on this subject and made some interesting calculations. I found that if the people of a single province of that country should consume an ounce a day of our flour they would need 50,000,000 bushels of wheat to supply them, or twice the Western surplus."

He wants to push sales in that populous country.

According to Dornbusch, the estimate of the world's wheat crop is as follows:—

	1897. Qrs.	1896. Qrs.
Europe	157,570,000	192,274,000
America (North and South) . . .	87,500,000	66,010,000
Asia (including India	29,700,000	34,500,000
Africa	4,600,000	4,600,000
Australasia . . .	5,000,000	2,750,000
Total	284,370,000	300,134,000

This table shows, therefore, a shortage this year in the world's wheat crop of just over 15½ millions of quarters. Only one country in Europe is likely to have a greater quantity of wheat this year than last. That country is Portugal

Meeting of Grain Board.

This meeting was held in Winnipeg on Sept. 22, all the members being present except Mr. Carruthers, of Montreal, who thinks the meeting uncalled for, and Mr. McQueen, of Carievale. Grain was on hand from almost every shipping point, and, with the exception of a little smut and a few slightly shrunken samples, the quality was exceptionally good. The bulk of the crop will go Hard and most of it will grade high. Regina, Rapid City and Indian Head district had about the heaviest samples, and out of these an extra Hard grade was selected.

The business of the board was introduced by reading the minutes of the last meeting, after which Mr. McLaughlin, an eastern member, asked the chairman what action the government took in regard to the mixing of inferior grades with No. 1 Hard at Fort William.

This question started a very lively discussion. No answer had been got from the government in reply to the resolution of last meeting against re-grading at Fort William. After a pretty free discussion, in which all sides took part, Jas. Riddle, M. P. P., said he thought the best thing was to ask the government to appoint a Royal Commission to investigate the facts. At last the following resolution was passed unanimously: Moved by Mr. Riddle, seconded by Mr. Elder, that the chairman be directed to send copies of the resolutions passed by this board last year to the Minister of Inland Revenue, the Minister of Trade and Commerce and the Dominion members of Manitoba and the Northwest Territories with the request that the government at once take steps to carry out the recommendations of this board.

The resolution referred to was passed at last year's meeting of the Standards Board, on motion of J. Riddle, seconded by John McQueen, and carried unanimously. It reads as follows:—

"That this board request the Dominion government to establish a commission to enquire into the whole inspection system and practice, and its different interests. Farmers, millers and dealers to be represented on said commission, which shall make such recommendations to the government for any changes in the inspection system as they may deem necessary. This board also urges that the above commission shall be appointed at an early date."

Other resolutions of a more or less temporary bearing were also passed at the same meeting and a great deal of discussion indulged in. But all the topics of permanent interest could have been brought within the scope of this commission, and it is one of the curiosities of official courtesy and procedure that no acknowledgement was even made of the reception of the resolution having reached the department.

The next point was to fix the standards for the year's crop. This is already done in the rough by Act of Parliament, but as a means to avoid endless disputes, this board of practical farmers, grain merchants and grain inspectors, has been appointed to give the statute a practical embodiment in the shape of samples, made up from bags representing the produce of the whole country. So perfect has been the harvest season that only the grades of Hard have been fixed, and inspectors are to decide on their own responsibility for the grade of the very small possible quantity of Northern or inferior grain that may yet come before them.

Prompt relief in sick headache, dizziness, nausea constipation, pain in the side, guaranteed to those using Carter's Little Liver Pills. One a dose. Small price. Small dose. Small pill.

Manitoba Standards.

This year's standards did not excite as much discussion among the members of the Grain Board as did those of the year before. They were finally decided on as follows, and corresponding samples have been distributed to all parties interested:

Extra Manitoba Hard—Weight 62½ to 63 lbs. per bushel.

No. 1 Hard—Weight, 61 lbs. per bushel.

No. 2 Hard—Weight, 60 lbs. per bushel.

No. 3 Hard—Weight, 58 lbs. per bushel.

No. 1 White Oats—Weight, 37½ lbs. per bushel.

No. 2 White Oats—Weight, 35 lbs. per bushel.

Provision was made by resolution that in cases where standards had not been selected the inspectors were to grade according to the meaning of the Act.

The grades for which standards not selected were Nos. 1 and 2 White Fife, Nos. 1 and 2 Northern, and Nos. 1 and 2 frosted. There were no samples in the lot from which these could be made up, and it is not expected they will amount to anything in this year's crop.

The Wheat Stem Midge.

The latest accounts about the wheat stem saw-fly is that the "white heads" have been submitted by Director Saunders to the highest American authority on fungi, and he is confident that the injury results from a fungus disease, but has not yet suggested a remedy. A fungus has been noticed at the Brandon farm on the diseased plants, but that does not account for the presence of the insect on the plant. Further examination may determine more clearly the real nature and cause of the evil.

Home-Made Binder Twine.

"A movement is said to be about to be started so that the demand for binder twine will be supplied from local sources, says the Salcoats Siftings. The Galicians are expert workers in linen, and as flax can be satisfactorily grown in this country, they will probably be supplied with seed next season, and the binder twine question will be solved as far as this country is concerned. They do not require the expensive machinery that factories do, and as they labor for a small remuneration, the price will be lower than that asked for eastern twine. At first, only the local demand will be catered to, but later on there is no reason why the Northwest should not obtain its supply within its own borders."

There is perhaps no place in the Northwest where the climate is so well adapted to the growth of flax for fibre as the country west of Lake Dauphin. The Mennonite district, where most of the flax seed is raised, is much too dry for the successful cultivation of fibre. The Galicians are the very sort of people who by previous experience are most suited to the profitable production of flax fibre. But where can seed be found free enough from weeds to start with?

The Moose Jaw Times says: "J. W. Fletcher met with a serious accident when threshing for Nathaniel Harris. While adjusting a belt his left arm got caught and went around the casting a couple of times, breaking his arm in two places and tearing the flesh considerably. Had the casting not also broke the second time the arm went round, the result would have been worse."

Free to Every Man

THE METHOD OF A GREAT TREATMENT FOR WEAKNESS OF MEN.

WHICH CURED HIM AFTER EVERYTHING ELSE FAILED.

Painful diseases are bad enough, but when a man is slowly wasting away with nervous weakness, the mental forebodings are ten times worse than the most severe pain. There is no let up to the mental suffering day or night. Sleep is almost impossible and under such a strain men are scarcely responsible for what they do. For years the writer rolled and tossed on the troubled sea of sexual weakness until it was a question whether he had not better take a dose of poison and thus end all his troubles. But providential inspiration came to his aid in the shape of a combination of medicines that not only completely restored the general health, but enlarged his weak, emaciated parts to natural size and vigor, and he now declares that any man who will take the trouble to send his name and address may have the method of this wonderful treatment free. Now when I say free I mean absolutely without cost, because I want every weakened man to get the benefit of my experience.

I am not a philanthropist, nor do I pose as an enthusiast, but there are thousands of men suffering the mental tortures of weakened manhood who would be cured at once could they but get such a remedy as the one that cured me. Do not try to study out how I can afford to pay the few postage stamps necessary to mail the information, but send for it, and learn that there are a few things on earth that although they cost nothing to get they are worth a fortune to some men and mean a lifetime of happiness to most of us. Write to Thomas Slater, Box 2047, Kalamazoo, Mich., and the information will be mailed in a plain sealed envelope. 1883



Hotel Beland

Rooms en suite with bath and all modern conveniences.

Rates \$2.00, \$2.50, \$3.00 and \$4.00 per day.

Is especially adapted to please the commercial trade.

Is in the centre of the wholesale and retail district. Is in possession of a perfect system of steam heating. Special rates will be made for families and large parties according to accommodation and length of time contracted for.

W. D. DOUGLAS, PROPRIETOR.
WINNIPEG MAN.

SETTLERS INFORMATION

Maps of City and Province,
Homestead Regulations,
Land Offices and Agents,
Mining Regulations,
Cattle Quarantine, Duty Etc.
Time Tables, S.S. Sailings,
Fares, Distances, Etc.

(Officially Compiled.)

TOVEL'S POCKET DIRECTORY.

AT BOOKSTORES 5c ON TRAINS.

When writing advertisers, mention The Farmer

Shipping Certificate, State of Minnesota, Inspection at Duluth

(See article "Inspection In and Out," page 340.)

No. 189

Inspected on Board

Bu. No.

Loaded

Bu. No.

Loaded

Bu. No.

Loaded

Bu. No.

For Account of

Inspector Weigher

Any claim for damages arising from wrong inspection or weighing must be presented to the Chief Inspector of Grain before the vessel or car on which it is loaded leaves the port.

No.

OFFICE OF CHIEF INSPECTOR OF GRAIN,
Duluth, 189

This is to certify that there has been inspected into

by Deputy Inspector

STATE WEIGHTS:

Bus.	Loaded
do.	do.
do.	do.

MINNESOTA GRADES.

For Account of

A. C. CLAUSEN,
Chief Inspector.

Chief Deputy.

[ENDORSEMENT ON ABOVE].

ENTIRE CARGO.

..... Bus. No. 1 Hard Spring Wheat.

..... Bus. No. 1 Northern Spring Wheat.

..... Bus. No. 2 Northern Spring Wheat.

..... Bus. No. 3 Spring Wheat.

..... Bus. Rejected Spring Wheat.

..... Bus. No Grade Spring Wheat.

Then and Now.

As a boy and young man I worked on a farm by the month. In those long ago times there were no binders, or reapers, or cultivators, no riding plows, or any farm machinery with a seat for the driver. The potatoes and corn were tended with a hand hoe; our grain was cut with a hand sickle, a handful at a time. The grass was cut with a scythe and raked with a hand rake. A common blacksmith made our pitchforks, hoes, scythes and plowshares. None of these things were kept at the store. If we wanted nails of any size the blacksmith made them for us. It was all work no play in those days. All through the summer the hired men and boys were called up in the morning when it was getting a little light. The cows were milked and the scythes ground before breakfast. We ate at about sunrise and went immediately to the field. There we bent to our work until the dinner horn sounded. After dinner we went directly back to the field and worked, usually, until dark, then milked, had our supper and went to bed, tired enough.

The boys can see that all this is changed. Farmers don't work so many hours, and the boys have more play days. The boys seem just as anxious to leave the farm and go to the city as boys were in those days. You may think that farming is slow, and it is, if getting along simply means getting property. Prosperity is more than getting money. Farming has come to be considered a noble calling, which it really is. The farm with its healthful surroundings is the best place on earth to lay the foundation of a manly character which will open the way to usefulness and true success. The boys who swear, smoke and chew tobacco are making their greatest mistake. Foolish habits of any kind will block your way to the greatest success of which you are naturally capable. Our greatest men began life on the farm.—W. L. Camp, in *Prairie Farmer*.

When a man is going down, don't increase his trouble; when everybody is blaming him, do not swell the chorus of censure.

A Giant Harvester.

This season, in the great wheat-growing section of the San Joaquin Valley, a giant harvester has been in use which cuts, threshes, and sacks the wheat growing on one hundred acres daily. The machine, when all its sickles are in use, cuts the enormous swath of fifty-two feet. Eight or ten men are able to handle it easily, and it turns out from 1,400 to 1,800 sacks of wheat in a ten-hour day. The machine is arranged with a central body, which is the regulation twenty-six-foot harvester. On each side of this main sickle is a thirteen-foot sickle. When the machine began work this year, the traction engine, which was built specially for it, pushed this enormous harvester through the heavy grain of the islands in the San Joaquin river as easily as a team of horses would draw a wagon on a road. When, however, the softer ground was reached, the weight of the machine proved to be so great that the wheels sank into the soil, and the traction engine could not perform its work as rapidly as it should have done; hence, there was a great loss of power. To remedy this, the side sickles had to be removed. The output of the machine in this new form is 600 to 800 sacks per day. Next season the owners will be able to use it on upland only and sickles, thus making it the largest harvester in the world.—*Harper's Weekly*.

As will be seen by advertisement elsewhere in this issue, Fred. Smith, of Brandon, is the wholesale agent for the Carter Wire Fence machine. Mr. Smith is known as a responsible and trustworthy farmer, and any one doing business with him will be squarely dealt with. He informs us that he has fully tested the wire fence on his own farm, and he is prepared to prove that it is a cheaper and much better fence, than barbed wire, as it takes less posts when woven with the Carter machine, which costs only \$15.

Ordering goods by mail is a necessity in cases where the would-be purchaser is a long distance from the central market or place of production. Mail orders offer unscrupulous dealers great temptations to stick their customers by unloading, at exorbitant prices, their old or damaged stock, which they would not dare to offer in the local market. Leslie Bros., furniture dealers, Winnipeg, have an established reputation for square dealing. Mail orders may be sent to them, knowing that you will get every attention and the same value for your money as if you visited their store in person. They issue an illustrated catalogue, which is sent on application.

Two cowboys have recently ridden bronchos from Sheridan, Wyoming, to Galena, Illinois, a distance of 2,400 miles, in ninety days and the horses subsisted all the way on the grass that grew en route. The horses travelled unshod, and when they reached the end of the journey the animals were in as good condition as when they started. The ride was made at the instance of the United States Department of Agriculture for the purpose of proving the value of the broncho as a military horse for Europe.

Face a situation, and you are three-quarters master of it.



There is implanted in every man a love of life strong enough to make him tremble and kneel before death when he thoroughly recognizes its approach. The trouble with men is that they do not recognize death unless it comes in some violent or rapid form. Consumption kills more men than wars, famines, plagues and accidents, but its approach

is insidious, and men do not realize that they are in its clutch. While consumption is a germ disease, the bacilli will not invade sound and healthy lungs. The lungs must first be in a diseased condition.

First a man feels a little out of sorts. Probably he is overworked and has given too little time to eating, sleeping and resting. His appetite falls off. His digestion gets out of order and his blood does not receive the proper amount of life-giving nutriment. The liver becomes torpid and the blood is filled with impurities. These are pumped into every organ of the body, building up unhealthy, half-dead tissues. The most harm is done at the weakest spot, and most frequently that spot is in the lungs. A slight cold leads to inflammation, the bacilli invade the lungs and we have a case of consumption.

Ninety-eight per cent. of all cases of consumption are cured by Dr. Pierce's Golden Medical Discovery. It is the great blood-maker and flesh-builder. It restores the lost appetite, makes the digestion perfect, invigorates the liver, purifies the blood, builds new and healthy flesh and drives out all impurities and disease germs. It cures weak lungs, spitting of blood, obstinate coughs and kindred ailments. No honest druggist will recommend a substitute.

Mrs. Ursula Dunham, of Sistersville, Tyler Co., W. Va., writes: "I had a pain in my side all the time, had but little appetite and grew very thin. The 'Golden Medical Discovery' promptly cured the pain, restored my appetite and increased my weight."

THE NOR'-WEST FARMER

ESTABLISHED 1882.

The only Agricultural Paper printed in Canada between Lake Superior and the Pacific Coast.

THE STOVEL COMPANY,
PROPRIETORS.

CORNER McDERMOT AVE. AND ARTHUR ST.
WINNIPEG, MANITOBA.

SUBSCRIPTION to Canada or the U.S., \$1 a year, in advance. To Great Britain \$1.25 (5s. sterling). Agents wanted to canvass in every locality, to whom liberal commissions will be given.

ADVERTISING RATES.

Transient advertisements, for less than three months, 15c. a line (each insertion). Terms for longer periods on application.

All advertisements estimated on the Nonpareil line—12 lines to an inch. A column contains 128 lines. Copy for changes in advertisements should be sent in not later than the 1st of the month to ensure classified location in the same month's issue. Copy for new advertisements should reach the office by the 4th of each month.

LETTERS.

Either on business or editorial matters, should be addressed simply "THE NOR'-WEST FARMER, Winnipeg," and not to any individual by name.

WINNIPEG, OCTOBER, 1897.

NORTHWESTERN WHEAT TRADE.

The buyers' combination, whatever that may mean in its influence and extent, is the most prominent ground of discussion and complaint from the farmers' side, but we cannot go far into the question without uncovering some other points that have been partially obscured by lapse of time, but cannot be buried, because they are closely related to the difficulties which the farmers find in the operations of our grain dealers. Combines in themselves are perfectly justifiable so long as they do not interfere with the rights and privileges of parties outside. Take the present position of the wheat buying business in Winnipeg. So long as every dealer could only sell in quantity after he had got hold or control of enough wheat to make a deal with outside purchasers, he was bound to lose the sale if he could not arrange in some way with other holders to make up at the desired date the quantity and quality of the grain asked for. A combination of two or ten or twenty dealers that agreed to pool their lots so as to sell to the best advantage of the whole, whenever an opportunity presented itself, was very much in the interests of economy and would naturally enable each of these men to do his business at less cost for interest and working expenses, and probably benefit to a greater or lesser extent the original producers from whom they buy. And if they choose to arrange for similar economy in the cost of buying, it would be rather difficult to prove that they are doing anything outside their legal rights as business men, or morally wrong. But the men who form syndicates of any sort are as a rule very human, and are apt to use their business resources all round in such a way as to forward their own interests to the greatest possible extent, in the very same way that a farmer is prone to sell for a tall price a very ordinary article that it is in his interest to dispose of. No one has so far suggested that the combination of buyers

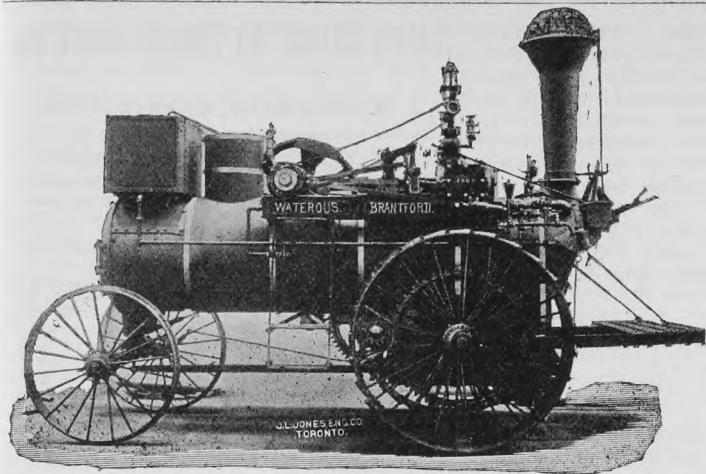
is for illegal purposes. And it is not even proved by any one that has hitherto undertaken to criticize their procedure that the syndicate system, now pretty fully developed in the wheat trade, has had the effect of "bearing" prices on the local markets to any definite extent. Duluth quotations come to us from a market in which the amount and methods of the grain trade preclude almost entirely the use of unfair methods in buying and handling farmers' produce, and we do not find Winnipeg quotations compare very unfavorably with the prices on that market. It should be kept in view at this point that the holder of American wheat at Duluth has privileges from which the Canadian shipper via Duluth is precluded. At Duluth there are large mills with buyers continually on the market ready to buy for their great daily consumption, and outside the lake ports the holder of American wheat may sell at any point en route, when he sees it to his interest to do so. The Canadian stores in bond, and must ship out only for consignment to Canadian ports or in transit to Europe. The American tariff favors at Duluth the American dealer, and to that extent Canadian wheat is worth less than American. Let the opponents of the syndicate system of buying and its hidden ramifications demonstrate that it makes our wheat sell for less than Duluth values, and they will have a strong case to go upon. The syndicate system will now and then prevent the spurts of competition on local markets by which a few loads are occasionally sold at fancy prices, but there must be a greater mass of evidence than is now before the public before we can successfully maintain the plea that syndicate buying or its various equivalents are unfairly depressing the price of western wheat. At the same time every such combination is so far one-sided, and as its members are all very human and shrewd business men, they will bear a good deal of watching, and cannot fairly complain if they are so watched and occasionally misrepresented and misjudged.

But the scale of prices is not the only matter on which the farmer and his friends require to keep a sharp lookout. The methods of handling in transit are not a thing of yesterday, and there is no point in the category of farmers' grievances on which more distinct ground can be taken, or with which he has a more direct and distinct right to interfere. The whole of our wheat is ostensibly sold on grade. A buyer on the local market may not say a word to the seller about the grade of the load he bids for, but he is all the time buying with reference to the grade that load will help to make after it gets into his elevator. Much of what he buys may be near the grade he aims at, but a few extra good loads may help him to raise a notch a lot that he has bought at the price of a grade lower. To all such processes of blending at the purchasing point no reasonable objection can be taken. Every car has to stand inspection at one point or another, and if put through a terminal elevator, as at Fort William, its identity is at once lost, and when he sells he sells, it may be, not a pound of his original deposit in the bin. Of course, that dealer will turn round and ask what the farmer has to do with that. His interest ceased when he had parted with the wheat and got the cash in its place. To this the farmer very properly retorts that if a dealer puts in No. 1 hard, and can when shipping out to the second buyer add a fourth more out of a No. 2 hard bin and still get a No. 1 hard outgoing certificate, the quality of that shipment is lowered accordingly, and either the new purchaser is defrauded, or, if not, the reputation and relative price of this country's wheat product is to that extent low-

ered, and to that extent the country is injured. No amount of logical hocus pocus can extricate the operators at Fort William out of this dilemma. There is no reason why dealers should be prevented from mixing their wheat as it goes out of the elevator in any way they please. But the government stamp should not on any pretext be affixed to such blends, and the bill of lading ought to show distinctly how much of each grade goes into each cargo. Such is the law in Minnesota, and we cannot do the same thing here a day too soon. The seller may either make up a sample from his shipment or show his shipping bill, but he ought not to have any grade on that shipment other than the first, which by his recent manipulations he has vitiated.

There is a still older and, as some men insist, a more unbearable grievance, against which farmers have for years been kicking. That is the elevator monopoly. When transport facilities were fewer, the railroad was quite entitled to provide that the men who had at that stage of progress invested capital in elevators should be to some extent protected in their investments. We do not hear that the railroad threw any obstacles in the way of combines of farmers who sought to benefit themselves by putting up elevators of their own, and, by the way, the history of some of these farmers' elevators must be rather sorry reading for the men who made the investment. And perhaps, when we have all the freedom we contend for, some of us may get as soon tired of handling our own wheat as we were of owning our own elevators. But even if that were so, it is no part of the functions of Canadian governments to interpose their paternal authority to prevent farmers from adopting an unwise policy or bad business methods. Every farmer has a constitutional right to sell when and to whom he pleases, and it is the business of governments to see that that right is not interfered with. That right is by every elevator interfered with to a greater or less extent. And it may be safely contended that the reason for giving elevators their present privileges has certainly ceased to exist. We are told that every buyer may on reasonable terms buy through somebody else's elevator, and that the monopoly of established elevators will be stopped whenever they refuse such use. This looks very nice on paper, but why do men well versed in all the intricacies of the business go on building new elevators at the present rate, if the right to use other people's is good enough for practical purposes? That argument will not hold water, and if it is right to permit a new elevator to be built when there are plenty already for all the actual wants of the locality, why should not another man of limited means be permitted to build at the same point a flat warehouse to suit his business, or even to ship his one car of wheat if he chooses? And only the other day, Mr. Douglas instanced the cases of Wapella and Fleming, where everyone was apparently well pleased to do business through flat warehouses. Now these places have elevators, and the warehouse is a dead horse because the C.P.R. has so ordained. Mr. Douglas is open to correction on this and other points if at any point astray. But if not, ample proof already exists of the necessity for thorough investigation of the system by which our grain products are controlled from the time they are ready to appear on the market. The truth can do harm to no legitimate interest, and the sooner we get at it the better.

This is one of the questions that must be looked at from a good many sides. Here is one:—



The above illustration is an exact representation of our

18 H. P. WATEROUS TRACTION ENGINE, THE STRONGEST AND BEST TRACTION MADE.

The Waterous Engine Works Co.,

LIMITED,

WINNIPEG, MANITOBA.

THRESHING MACHINERY

Write for our new No. 13 Catalogue, just published, with new cuts of our Waterous Engine and the Pitts Niagara Thresher, showing improvements in our machinery for 1897, making it the best threshing outfit in the market.

"Farmers and others claim that there should be another grain elevator at Cypress. During the late blockade some men who had threshed, expecting to get the grain into the elevator, had to leave the wheat exposed in heaps on the prairie, not having granaries sufficient to hold the grain."

Once upon a time there were plenty of such cases all over the country, and everybody clamored for elevators. Cypress has not got past that stage yet. Now, let us suppose that the owners of the elevator accommodation there want as much to clear their elevator to allow them to carry on their business as the man who raises wheat, but has no place to store it. And suppose further that there is absolute free trade in grain loading, just as the State laws south of the line now provide for. The man with 20,000 bushels in his elevator has as good a right to cars as the man with 1,000 piled up in his field because he has no granary. And if there were no protection to the capital invested in the new elevator called for by this item from Cypress River, what sane business man would put up money in providing accommodation that no one would pay for except under the pressure of the direst necessity? Elevators, like most other investments, are put there because they are so much needed that the people that want to use them are willing to pay fair value for the use of them. It is this aspect of the case that discounts the call for opening the stations with elevators to all. The railroad companies cannot carry out the grain as fast as it is threshed and delivered, and if the transport system is not to be reduced to a state of downright chaos, the elevators cannot be left without special consideration. Every elevator is useful as a storage depot till the crop can be moved. This fact the C. P. R. is fully cognizant of and will take into account.

DIRTY WHEAT.

"An interim certificate for a carload of wheat at Fort William, received in the city, shows that in cleaning the car 120 bushels of dirt was removed to allow of the wheat grading "2 hard." This car was shipped from a point on the C.P.R. at which there is no elevator. Returns from some other cars run about 80 bushels of dirt. The loss in freight alone amounts to almost two cents per bushel and half a cent extra for cost of cleaning. This is an indication that some of the crop

this year is very foul, as it comes from the threshing machine."

The above item, copied from a city paper, looks very much like a "stretcher." We are not ourselves in the stretching business, but have taken a little pains to get at the facts of the case, and find that there is no difficulty in getting cases that bear out the purport of the above statement. Here are a few cases. One, in which 30 per cent. is foul seeds and oats, but nearly all oats. Another of about No. 3 hard grade, with about 100 bushels in it of dirt, mostly foul seeds. A good many that show 50 bushels of dirt to the car. Cars that have been cleaned before shipment, with a startling percentage of wild oats still in the sample. These are mostly within a 60-mile range of Winnipeg. The extreme west and southwest are still pretty free from foul seeds.

COUNTY EXHIBITS.

Judged by the success they manage to achieve, and the harmony between directors and exhibitors, the Winnipeg Industrial may be regarded as well and ably administered. One of the things they do is to send out their manager to every leading fair in the east to look out for good ideas that may be turned to account in their own future practice. These "wrinkles" they must think worth the money they cost, or they would not go on spending it. Sound business men spend money in the same way, and don't regret it. But there are cases in which such wrinkles can be picked up at no cost in money that are still very much worth taking note of. The Minnesota State fair, which has just been held with great success, supplies a few pointers, to one of which we beg to draw special attention now. The fair season is past, but this is the time to prepare for the next, especially in the matter of grain produce. We refer particularly to the county exhibits. The Winnipeg Industrial has already offered prizes for county or municipal collections, but as a rule nearly every such municipality has allowed it to go by default. Very much the same thing took place in Minnesota till somebody hit on the idea of offering prizes big enough to be divided among the competing counties in proportion to the merit of their

particular exhibits. The interest in this competition has grown year by year till this year ten counties did well enough to share in the awards. The show was held in September, when vegetables could be made a good feature in the competition, and the number and quality of each exhibit were reckoned up by points. Judged in this way, Ottertail, a west central county on the upper Red river (Fergus Falls is a leading town) had the highest number of points, 1240 in all, and a money prize award of \$162. Anoka, very near St. Paul, had 1205 points and \$158. Renville, the 10th on the list, had 415 points and \$54. The exhibits attracted much attention, and great interest was felt in the awards. The judges based their opinions upon the qualities of wheat, corn, oats, barley, flax, rye presented for their inspection; also upon the grains in sheaf; flax, fiber, sugar beet, sorghum, native grasses, tame grasses, potatoes, stock, vegetables, culinary vegetables, fruits, greatest number of varieties presented, design and taste of arrangement.

Our object in referring specially to this matter now is that the few public spirited men through the country who make it their business to attend to the reputation of their districts may be induced now, when grain of all sorts is abundant, to look out for, secure, and store in good order samples of the produce of their districts that can be displayed next July at Winnipeg, and make a showing that will do justice to their actual merits. Virden has heretofore taken a good place, mainly because its worthy president had forethought and zeal. Why should not another dozen districts be looked after now, that the reward may be reaped in due season? Our Winnipeg directors may or may not see the propriety of following Minnesota in the manner of dividing awards, but it should be a point with managers of agricultural societies to look up and secure the best that their district has to offer, and be prepared for the chances of honor and profit when they come in their way. Winnipeg may be depended on for prize money whenever there is merit in sight.

—While J. Littlehales, of Meadow Vale, N.W.T., was trying to cook his dinner in a big hay meadow on a windy day, he set fire to the grass and burnt his whole stacks. But for the wind blowing in their favor all the hay in the meadow would have gone. Perhaps that gang will know better next year.

IN MEMORIAM.

Within the last month three men, well known to the farming community, have been removed by death. John Hettle, M.P.P. for Turtle Mountain, and President of the Manitoba Dairy Association, was the most widely known. Born of Scotch parents at Norham-on-Tweed, he migrated with his parents to Ontario, where he ran a general store at Teeswater, and one of the first butter factories in the Dominion. His product took a high place at the Philadelphia centennial show. He came to Manitoba in the early 80's as the representative of the Maxwell Implement Co., and has been elected three times to the local legislature as the representative of his district. His connection with the Dairy Association and Hail Insurance Association made him still more widely known. He has gone all over the province, and outside of it, too, as a worker and speaker, making many friends and no enemy that we know of. His homely and practical talks to farmers at the Institute meetings were very instructive and won for him widespread popularity among agriculturists. The funeral at Boissevain was the largest ever seen in Southern Manitoba. He will be succeeded in his office as president of the Dairy Association by Richard Waugh, the present vice-president.

Going westward, we find that Robert Crawford, of Indian Head, was cut off by peritonitis after a very short illness. He was, if possible, a still more canny Scotchman than John Hettle, and his genial ways made him universally loved. He was for two years a member of the Northwest Council. Before settling at Indian Head, he was for many years an officer of the Hudson's Bay Co., his last post of service being at Augawa Bay, at the mouth of Hudson's Bay. He was a Presbyterian church elder, and many times a representative at Presbytery and General Assembly.

In Thomas Stone, the Calgary district has lost one of its best men, one of the best stamp of English farmers and business men. Mr. Stone first came to Canada from England in 1889 with Sir John Lister Kaye, and in 1892 became general manager of the Kaye farms. Afterwards he engaged in the cold storage and pork packing business in Calgary. He was a well-built and vigorous man, and his too early death is attributed to cold caught when attending the Business Men's Convention last year at Winnipeg.

—From almost every point there come complaints of the spread of skunk grass in the hay meadows, so as to make them worth very little as winter feed.

—On August 24th Mr. Pillsbury, at a public meeting, spoke as follows:—

"I make the prediction that the average price of choice milling wheat will be above a dollar in Minneapolis for the year to come; and, after the rush of the first farmers' deliveries, there will be plenty of opportunities for every farmer in this state, who has genuine number one northern wheat, to obtain a dollar a bushel for it at his nearest country elevator."

Mr. Pillsbury has figured as an authority on wheat for a good many years, but the indications for the present are that he will have to take his place among the minor prophets. Dollar wheat was a fleeting vision, and may not be again in evidence. But Mr. Pillsbury is no fool. He held a big lot of cheap wheat, and did his best to add to its value.

—Minnesota has had a very splendid State fair, the combined result of good management at the centre and more hearty response on the side of the exhibitors. This is just as it should be, but it is interesting to compare our own five-year-old exhibition at Winnipeg with the collection got together by a large, old settled and wealthy state, with a host of outside competitors from still older states. The number of live stock shown at Minnesota's two best State fairs was as follows:—

	1896.	1897.
Cattle	446	740
Horses	267	340
Sheep	272	231
Hogs	269	235

Winnipeg had entered in 1897 as follows, several of the entries including more than one animal:—

Cattle	515
Horses	413
Sheep	200
Swine	260
Dairy	365
Poultry (pens)	524

This is a comparison of which our province, one-third the age, and with a still smaller relative area, may well feel proud. Our government sent down an exhibit that drew considerable attention, and for which our friends to the south were ready to give us full credit. The Northwestern Farmer says: "The railroads made interesting exhibits, and there were a few mercantile displays, but the leading features were the Penitentiary exhibit and something new in our fair, an attractive exhibit made by the Canadian government, showing the products of the Canadian Northwest. That this was attractive the presence of large crowds amply proved."

Long may this spirit of friendly rivalry and mutual appreciation prevail between north and south.

Mischances.

W. Kellington, Neepawa, has lost by fire about three stacks of wheat, estimated to contain 300 bushels. A spark from the threshing engine did the mischief. There was no spark-arrestor on the smokestack, nor were there any other safeguards against fire.

This is one of several similar accidents resulting from working recklessly on moving machinery. While threshing at Mr. McBean's Greenridge, the engineer asked Kenneth McDougall to throw the fly-wheel of the engine off the centre. In attempting to do it his arm became entangled on the wheel and was fractured near the hand.

In the Qu'Appelle district three separators passed through the fire in one week lately. At one a load of sheaves went alight and the separator was barely saved. In the second case, the straw pile was set alight and the straw carriers were destroyed, while in the third case the straw was found alight in the separator itself, luckily before the flames had reached any dimensions. The owners of the outfits are looking for insurance, which it is not likely any prudent company will give.

A bad accident occurred in connection with the threshing outfit of John Douglas, of Heaslip, which is at work down in that district. A team of horses belonging to Tom Douglas was left tied to the front wheel of the engine while the gang were away at dinner. On returning, it was found that the straw at the back of the engine had caught fire, and the horses, getting singed and excited, had broken loose and walked deliberately into the fire and lain down, as horses will do in such a case. They were found roasted and charred almost to a cinder.

DAIRY STOCK, BY PUBLIC AUCTION.

J. S. COCHRANE, CRYSTAL CITY,

Having retired from farming, will offer for sale by auction at his farm, near Crystal City, on Thursday, Oct. 14, at 2 p.m. the whole of his well-known herd of Dairy Cattle, including the cow Maud, champion of the Ayrshire breed and champion dairy cow at the Winnipeg Industrial Show. The bull and several others of the herd are also prize winners. There are 13 head of pure bred Ayrshires and 4 good dairy cows. The whole will be sold without reserve.

In connection with the above, Mr. Cochrane begs to intimate that he has secured the sole agency for a large part of Southern Manitoba of the celebrated Knoll Washer and Wringer, first prize at the World's Fair, which he will do his best to introduce to every farm home, strictly on its merits, that will bear any fair test and save hard work and money to every purchaser.

GET YOUR

Photographs

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Fleming Block, BRANDON.

When Buying, be sure you get

The Best

The Marvel Coal Furnace
The Hilborn Wood Furnace
The Granite Range for Coal
and Wood
The Patron Cook Stove for
Wood

Are the best in the Market.

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AMONG THE FARMERS.

In the Dauphin Country.

I have always admired Dauphin, its rich soil, its abundant streams and the enterprising men who went out north as its pioneers. But I like to see even a very good country after it has got through its first pioneer stage, and have therefore stayed out till I could get a reliable estimate of its present resources and future prospects. These I found in the main highly satisfactory. One man, who had burnt two or three frozen crops further south, I found here with a good big crop, and highly satisfied. Another likes to see the blue line of the Riding Mountains in front of his cosy homestead, backed by a few trees, and so on. It requires no great insight to find out that the crowded stooks of wheat and oats grew on soil with plenty of substance in it. I like very much the sort of weeds I saw on the unbroken prairie, golden rod and similar hard-wooded plants, with very little grass—the very kind of land on which, with good management, I would expect many crops of grain without exhausting it. The most troublesome annual will, I guess, be

so that a heavy rainfall is readily absorbed, and should a dry spell come on, crops would draw up moisture enough to keep them always healthy. Hot winds can do no harm, as they are cooled by the Riding Mountains to the south, and their moisture (for south winds, as a rule, are laden with moisture) will fall in warm showers on the lower land to the north.

The country along the railroad track gives little indication of the quality of the land a little away from it. At Plumas there are two elevators and a flat warehouse to take up the grain from the mixed farming country round about. After that the track follows a gravel ridge till near the crossing of Vermillion river, at which the new town of Dauphin is built. The country so far is of a mixed character, poplar clumps and land adapted mainly for grazing. Back from the track better land there is, and a lot of it, but it is only when Dauphin is reached that the best quality of the country comes out. Old Dauphin town was on the north side of the river, and a little to the east, Gartmore, pleasantly situated, two miles to the west, and the new town half way between them has wiped them both out. Most of it has been built this summer. It is no part of my business to detail the number of its stores, hotels and churches.

should kill a lot of seed this fall, the deeper plowing may bring up lots of older seed to start along with the wheat, and perhaps half smother it. I don't think deep plowing is really needed on such land now and would prefer to plow shallow and plan for going over well-seeded grain with a light harrow just as the weeds point through in spring. He believes in the harrow as a weed-killer, and I hope to see him try part of his land with one shallow plowing. His next neighbor will plow deep this fall, and thus give an opportunity for a good object lesson in different kinds of fall plowing. Mr. Malcolm had part of his family on a cattle farm, where stock did well, but now confines himself to grain, with, I trust, such crops as he this year shows.

A mile out to the west is Thos. Pollen, who crossed from Minnedosa some six years ago, with about 35 cattle. These on an outside farm have increased to 75, and most of his land near the town is now under crop. I crossed his fifth oat crop on the same land. Two years ago it was far too rank, but this year it was a little the other way, and will give more yield in proportion to the straw than anything I saw on my trip. He has this year built a house and barn that would be a credit to the oldest section of Manitoba, an illustration of which we give on this page. His wheat crop will be over 3,000 bushels, and oats about the same.

On every hand I found big stretches of grain crop, mostly wheat and oats, and have only room to mention the old families of Whitmores, Sinclairs, Macdonalds, Captain Mackintosh, MacCallum and Smith, some of their places snugly sheltered by the bush on the line of the river, others more in the open, but all well satisfied, as I think they have good reason to be. A good deal of wheat will be bleached, through standing out to save stacking.

Out 20 miles or so to the west, on the northern slopes of the Riding Mountains, several of the Galicians have squatted on land quite as deep and rich as any on the plains. Those who have employed them speak well of them as industrious and capable, so far as their ignorance of our language will allow. It was no part of my plan to take stock of the amount of recent immigration, which I understand is very large. The country is peculiarly adapted for a good class of quarter and half section farmers with moderate means and steady habits. Some of the land bears very little scrub, in other cases it may rise to bush, and alkaline spots come in, but for homeseekers these disadvantages don't count for much. There is plenty of easily available building timber within reach and good shelter for both buildings and stock.

The English speaking settlers on the Gilbert Plains are also numerous, and have been raising satisfactory crops. Fall shows are being held both at Glenlyon and Dauphin, where vegetables in abundance give evidence of the quality of the soil that produces them.

Every boy on the farm should be given a young animal to raise for himself, he to attend to it and take an interest in its progress. He will thus early become fond of animals and of farming, and will be more reconciled to farm life when he is grown. The boy who leaves the farm for the city, is the one who has never had any opportunities, and looks upon farming as drudgery. Labor becomes a pleasure when there is something to strive for, and the early education of the boy on the farm should be by giving him an interest in something. Nearly all children love pets of some sort, and if the pet is a farm animal it does much to forward their practical education.



Thos. Pollen's Farm Home, Dauphin, Man.

the pigweed, and judging from what I have seen elsewhere, it will need special care to keep this weed from getting a big share of the wealth of the soil. I have this year seen many acres of grain fields in which the stooks were black with pigweeds and sunflowers, the grain that the land was meant to grow being almost lost in the rank weed growth. There is just enough showing now in the new country of these weeds to make farseeing people suggest that a change of seed is wanted. Perhaps a change is needed, but what is more needful still is to find out the best way to keep the weeds from getting the upper hand in Dauphin, as they have already done on the older lands in the province.

The grain crops I saw were, as a rule, too rank for real profit. This may be owing to two causes. For wheat especially the great point is to have no more straw than will produce a sound and early ripe crop, and in that rich alluvial soil it is easy to plow too deep and prepare more plant food than any one crop can get the good of. Perhaps there may have been extra rainfall this year, and in a country where streams abound as they do here, I would expect more rainfall than we have further south. One great point I noticed in favor of the soil in the neighborhood of Dauphin. It is, as a rule, very porous,

The railroad runs northwest, and the principal street is at right angles to it. There was last year a heavy crop of wheat on the town site, and the unbuilt portion bears this year a very heavy crop. I was driven by N. Bawlf's wheat buyer, Mr. Mowat, a good way among the oldest settlers, going over about a score of farms, on which the grain crops were generally too heavy in the straw. A streak of hail did some damage in summer, lowering the yield. Further out there is less land under crop, but all over the country there is a great amount of new breaking. Up to last year, when the advent of the railroad had made export possible, there was very little encouragement to grow grain, and I was surprised to see so much cultivation as I found.

As regards the doings of the near-hand settlers, I may begin with Andrew Malcolm, well-known in the early days of Minnedosa as a capable dairyman. He has about five cars of wheat on one block and on Sept 10th, when I visited him, he had started fall plowing for next year's wheat crop. He is very much alive to the danger from pigweed and similar pests, and his plan was to plow as shallow as possible, so as to get a free germination of the foul seeds, and then considerably deeper a month later. My difficulty about this plan is that even if he

GARDEN AND FORESTRY.

Window Gardening.

Miss Lippincott, a well-known Minnecota seedswoman, gives the following pointers on keeping plants in winter:—

"Plants grown in the house are best kept in good shape by pinching the end buds of those shoots that grow too vigorously. This is much better than allowing a few shoots to grow until they need support, and then cutting them back.

"In taking up plants from the garden for house culture, it is best to cut back at least one-half, and, after potting in good soil, water at once, and put in a cool, shaded place.

"Amateurs, as a rule, re-pot too often, and keep their plants in too large pots. It is of no use to give a plant fresh soil before its roots have pretty well occupied the old. There is a proper time to re-pot and that is when the ball of earth is well surrounded by roots, a state that can be well determined by tipping the plant out of the pot.

"Another point to be remembered is that if large flower pots are used there will be more leaves than flowers. Often plants have refused to blossom simply because, having so much space, their energies were bent upon forming rootlets and leaves.

"It is essential to give the plants an abundance of air, but caution is required in so doing. A draught of cold air should never be allowed to blow directly on the plant; the window should be lowered from the top for a few moments daily, unless the wind blows strongly from the direction in which the window is located.

"The amount of heat required by the ordinary class of plants in the windows is sometimes a source of great anxiety to the amateur. My experience has been that the amount of heat may be governed by the effect upon ourselves; for example, if we are comfortable in a temperature of from 65 to 70 degrees during the day and 50 to 60 degrees at night, the same heat will be just right for our plants.

"Probably more mistakes are made in watering window plants than in any other part of their culture. It is, of course, quite natural that the heat of the ordinary room will have a drying effect on the plants; it is not advisable to keep the saucer filled with water constantly, as it has a tendency to induce sourness of the soil. The best method with which I am familiar is the practice of setting the pots in a box containing an inch or two of sand; moss will answer the purpose equally as well."

Why the Leaves Change Color.

Probably not one person in a thousand knows why leaves change their color in autumn.

A true and scientific explanation of the causes of the coloring of leaves would necessitate a long and intricate discussion. Stated briefly, and in proper language, those causes are these: The green matter in the tissue of the leaf is composed of two colors, red and blue. When the sap ceases to flow in the autumn, and the natural growth of the tree ceases, oxidation of the tissue takes place. Under certain conditions the green of the leaf changes to red; under different conditions it takes on a yellow or brown tint. This difference in color is due to the difference of combination of the original constituents of the green tissue, and to the varying conditions of climate, exposure, and soil. A dry, cold climate pro-

duces a more brilliant foliage than one that is damp and warm. This is the reason that American autumns are so much more gorgeous than those of England.

Qualities Possessed by the Bark of Trees.

Almost every plant, tree and root possesses some quality that can be made useful to man, even the bark of trees afford an interesting study. The outside covering of the hemlock, the oak, the tamarac, and some kinds of the willow contain the substance called tannin, which is used in the preparation of leather. The application of this tannin altogether changes the character of a skin and renders it indestructible by the ordinary process of decay. The bark of the balsam tree is covered by an immense number of bulbs or blisters of various sizes, sometimes round, sometimes oval shaped, containing pure liquid gum, which possesses great curative powers if applied to a wound and is so valuable that it has become an article of commerce. The bark of the alder and the soft maple will color black, while that of the butternut colors a beautiful brown. The bark of the sumac colors yellow. The bark of the slippery elm contains a glutinous substance in great quantities that is valuable for some purposes. The bark of the moosewood is easily separated into strings and is as strong as leather laces and was much used by the early settlers in Ontario for tying bags and for other purposes. The bark of the young basswood possesses the same qualities but in a lesser degree. The bark of the cherry tree is much used in the preparation of medicine. The bark of the poplar contains much nourishment and forms the principal food of the beaver and rabbit during the winter. The bark of the white birch is a most useful article to the Indians and is made into canoes, baskets, sap troughs, and coffins for the dead. Birch bark is strong, light and durable in its character and in certain districts is easily procured. The bark of the red willow is used by many Indian tribes as a substitute for tobacco. The bark of the cedar is of an inflammable nature and has the capacity of holding fire in a dormant condition if not exposed to the wind, but if the bark is waved in the air it will burn strongly and brightly.

Tree Planting.

The South Dakota Experiment Station recently issued a bulletin on experience in tree planting based very much on the actual work of farmers who have gone in for shelter belts and fruit. They find that for permanent uses elm and ash are best; box elder, or, as it is generally called here, hard maple, coming next. No objection is taken to it for the first few years, but it is found very shortlived in comparison with the ash and elm. Experience favors transplanting young seedlings on prepared ground, rather than sow where the trees are wanted. Pruning is most needed for the maples. A grove tall enough to furnish shelter will grow in from 6 to 10 years, and the growth is much helped by cultivation.

This record tallies very much with our own experience in Manitoba, and shows that in the main the conditions to success are much the same everywhere. The Russian poplar is finding much favor there, wherever it has been tried, the laurel-leaved willow being also full of promise.

Mr. Uniac, of Rathwell, has this year grown apples of the Duchess of Oldenburg variety on a dwarf tree in the shelter of a maple grove.

Thos. Frankland, of Stonewall, has this year been pretty successful with fruit. He sold a considerable quantity in Winnipeg, principally native plums from the different sorts he is testing.

The rough and ready style of gardening must be the rule for years in the newer settled parts of the west. Gardening with the spade is too slow. The plow, if rightly used on a well-planned plot near the house, will prove the best of all implements, and now is the time to use it to the best advantage. Before frost sets in, say late in October, plow the plot you intend for a garden as deep as the plow will go. If the bottom soil, when turned up, is not just the thing, spread a few loads of old, well-rotted manure on the frozen surface later on, and work it in with the harrow in spring. Then sow your seeds without more ado.

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FIELD.

Fall Plowing.

Half a crop is worth about as much as no crop at all. In some cases it is worth a good deal less than nothing. Any man who has seen to any purpose the grain crops of this season must have seen occasionally parts of a field, sometimes whole fields, in which the stools were black with pig-weed and similar plants that had quite overgrown the grain from which alone the farmer can take his profit. Pigweed seed, it is true, makes capital feed for cattle and pigs, but it is not on that account a profitable crop to grow, especially when wheat is worth 75 cents or more. Of course, nobody wants to grow pigweed. It is there only because they can't help it, or think they can't help it. In one sense they cannot help it. They have been doing their very best according to their lights to keep their land clean, and it has got gradually worse. That is quite true. It is also true that some parts of the same field are much worse than others, though the whole lot has been handled in the very same way. This difference in the same field can be readily accounted for. Before the ground was broken some spots, generally low spots, grew lots of pigweed, while the rest of the land bore different kinds of weeds that have been driven out by grain farming, while the pigweed, under the very same conditions, has overrun the sown crops. One season may be more favorable than another to a certain kind of weeds, just as the last cold spring was more favorable to wild mustard than usual, because the cold did less harm to the mustard than it did to the grain, so permitting the weeds to get the upper hand.

If there were no positive remedy for the hosts of weeds that now infest so much of our land, there would be little use for further discussion. But in the very same districts, sometimes separated by only a wire fence or a road allowance, we can find one crop clean, thrifty and full of profit, while the next is poor and what there is of it is often more than half weeds. How did this striking difference originate on land apparently of the very same original quality? Was good or bad luck at the bottom of it? Or was the main cause of the difference the way in which the two fields adjoining have been handled? We say distinctly that at this point lies the origin of the difference, and here must the remedy be sought for. Not one seed on that land came there by chance. If it was carried by the winds of winter over the smooth snow somebody's carelessness allowed that seed to ripen. Perhaps in the fall cattle that had eaten lots of that seed had wandered over clean land, scattering no end of undigested seeds in their droppings. But in most cases the seeds are there because they grew there, and were buried and embalmed, mostly by fall plowing.

As we are now situated, we cannot do without fall plowing, and the point to be found out is whether we can have fall plowing without such an enormous quantity of weeds in the following crop as to make it hardly worth the labor it has cost. The seeds are there in abundance, or they could not grow at any season or under any circumstances. Why is it that they come just when they do us most harm, that is in our wheat crop? Just because they have been turned up by the fall plowing so as to get the best chance of living in spring and starting equal with, if not before, the wheat we sowed with such care. Those foul seeds were all plowed down, some previous fall, deep

enough to keep safe and sound till they got a good chance to start into active life. Perhaps they were buried only last fall, perhaps several years ago. Some of them were, of course, destroyed, but most of them kept alive and sound and are ready for business the first good chance that offers. That is why so many fields were last summer buried in weeds. The land was getting exhausted by over-cropping with grain without any change, and as every year under such conditions fills the land with more seeds, we may expect matters to get worse instead of better, if we cannot do something to hinder it.

Summer fallowing, done as it should be, is the surest remedy. This year, indeed, crops have grown on ground fallowed only last year, so foul with weeds that they had to be plowed down over again. We say that did not happen, and could not happen, with men who fallowed intelligently. With proper fallowing, one, and often two, good clean crops can be got that will more than pay their way.

But summer fallowing is not now the point under discussion. What about fall plowing? We say confidently that for the most of such land as is this year foul, with no end of ripe seed scattered over it, the only safe way to fall plow is to go quite deep, one or two inches more than ever before. This will put the present year's heavy stock of seed out of the way till you can plan to beat it, and you will turn up soil with the least possible amount of foul seeds in it. One acre so done may be worth two done now in a slipshod way. And if you need to grow oats, leave the worst of your land till next May, and spring plow it. The oats will, as a rule, beat the weeds. But if you are bent on wheat as likely to bring most money, there is still one more chance that many others have tried year after year with great success, if you have not. Put in all your seed with a drill, say two inches deep, and a bushel and a half to the acre. Ten days after seeding, the weeds will show in great abundance. As soon as they begin to show (the sooner the better) go over the ground with a light harrow. Some have done it twice with great advantage. Every weed that is disturbed by that harrowing is as good as dead, and the wheat will get more good than harm by the process. Do it on a dry day for the best results. If you know better, tell us your plan.

Influence of Light on Plants.

In the year book of the U. S. Department of Agriculture, H. J. Webber, of the Division of Vegetable Pathology, thus writes:—"The effect of the light supply in determining the form of plants is well recognized. If a grass seed germinates under a tub, the little plant does not spread out at random in its growth. If the edge of the tub is raised to admit a ray of light, instead of growing upright, as it naturally would, the shoot bends toward the ray of light and grows by the shortest path to the opening. After passing into the full light it develops its normal form. The form and direction of growth of every branch is determined largely by the accessibility of light. The form and structure of every leaf also are just as largely dependent upon the light supply. Innumerable differences in the shapes of individuals of the same species are caused by the struggle to obtain light. Branches develop in positions where their leaves can be unfolded to the light with the least obstruction. The natural round and full symmetry of the tree grown in an open place is due to the unobstructed action of the light on branch development. Trees have developed their habit of lofty growth by a continuous struggle

to secure light. The same inciting cause has led to the development of the habit of twining in certain plants. Other plants have so modified their structure that they are able to secure sufficient light in the shade of the forest. Sleep movements of plants are other well-known reactions of light. In cultivation, the necessity of light is well recognized, and our plans for planting fields and gardens are made with reference to the plants used in order to secure the necessary light and nutrition for the best development of each individual."

Rape Growing.

Jas. Riddle, M. P. P., is gradually going more and more into the growing of Essex rape. He summer fallows earlier than most farmers, and sows rape from June 10th till July, seeding with his grain drill, keeping the rows three feet apart. Between the rows he cultivates freely and repeatedly. Besides all he wants for his own stock, he has sold 40 acres to Gordon & Ironside to be eaten by cattle on the ground, the price being \$200. This season the rape has done extra well. The summer rain pushed it along, and the dry fall has made it a perfect food, free from undue sponginess. The land will, after such cultivation and manuring, bear a choice wheat crop with next to no further spring cultivation, and should prove next season a landmark for those in search of wrinkles on crop rotation.

Mr. Robt. Paterson, city, is showing a beautiful sample of ripe flint corn, grown by Mr. Lonsdale, Headingly, from seed supplied him by Mr. Paterson from his brother's farm near Montreal.

The Farmer's Sun draws attention to the wonderful progress of labor-saving inventions within the last generation. It says: "The sickle has given place to the cradle; the cradle has been supplanted by the reaper; the reaper has made way for the self-binder; the rack lifter has robbed harvesting of half its terrors. But one of the greatest improvements of all is seen this year in the threshers shown by Abel that takes the sheaf, cuts the band, and then feeds the loose bundle of grain into the whirling cylinder. With this thresher there is no longer any chance of a stab in the hand from a careless band-cutter, or of being dragged in amongst the cruel teeth of the drum. All that is needed now is a machine that will take the sheaves from the mow, unload the grain boxes in the granary, and build its own stack. And, in view of the improvements already made, it would not be too much to expect that such will come."

Mr. Waller, 2½ miles west of White-wood, was without a well till 1887 or 1888. He then struck a good well at 44 feet, which at first overflowed, but sank to 25 feet. This summer the well went almost dry, and he had to water his cattle elsewhere. Looking for some spot to dig, with his hired man, (our old friend, Jimmy Forbes), he observed some crows and small birds settled in a ravine about 300 yards from the house. On going to the spot to investigate, he found a little water on the surface, which it was evident the birds had discovered, and used as a drinking place. He set James to work, and at three feet they had to bale, and at four quicksand was struck, and he has a flowing well. A piece of moose antler was found on the gravel three or four feet down. Where have this good man's eyes been for the last ten years? A spring that flows in the very driest season should be visible at any other time.

Problem of the Coming Century.

By Josiah Strong.

In the age of homespun, which, for most of our population, reached well on toward the middle of this century, the typical farmer could not only till his own soil, but build his own house, make his own furniture, and many of his own tools. His wife could take the wool as it came from the sheep's back, dye, card, spin and weave it, and then make it into a coat for her husband. That is, they could together do in a rough way work which now represents ten or a dozen trades. Their wants were simple, and most of them they could supply with their own hands. Such a couple could have raised a family in comparative comfort, if they had been alone on the continent. They were practically independent of the whole world.

The organization of industry has changed all this. In it was involved the division of labor. The work of one trade was divided between a dozen or twenty machines, each fed by a different man and each dependent on all the others. Moreover, great branches of industry have become linked together in a kind of endless chain of interdependence, so that one link cannot move far unless the other links move with it.

There has resulted a manifold multiplication of the products of labor, which has powerfully stimulated wants and greatly elevated the standard of living; and, further, we have become dependent on well nigh all the world.

Poets have sung the independence of the farmer, but that independence forever ceased with the transition from the age of homespun to that of the division and organization of labor; and this fact has a most significant bearing on the future growth of cities. When the farmer could directly provide for himself the necessities of life and patronized the tradesmen for little more than its luxuries, the number of farmers might have been indefinitely multiplied so long as unoccupied land remained; and if we could reverse the motion of the earth and roll it back into the age of homespun, we might relieve the pressure upon the city by planting families on unoccupied land; but with the division of labor this became impossible. The farmer can now do but one thing, and that is to farm. He can supply the many wants of his family only by turning his produce into money, which means that he must farm for the market. This fact makes him dependent on the demand and supply of the world. Now it should be observed that the world's demand for food must necessarily be limited and that the food supply to-day is equal to the demands of the civilized world to-day. It is true there is want even to starvation, but that is due to the lack of distribution, not to any lack of production. There are already more persons engaged in farming than are needed, with the improved agricultural implements of recent years, to supply the world's demands for food, and that accounts for the general depression of agriculture in Europe and America during recent years.

If we could transfer 100,000 families from our crowded cities to unoccupied land, and so train them as to make them successful farmers, the world would not consume any more food to accommodate them. They could succeed only by getting the market, and they could get the market only by driving 100,000 other farmers out of it, which would mean driving them off the farm and into the city.

Again, efforts are being made to relieve agriculture by improving its methods. It is said, "If men farm with their brains, they will make money, and then

they will remain on the farm." By all means let us make farming intelligent. Indeed, if we do not, we shall lose much of our hold on the European market. We have been able to command that market by reason of our cheap virgin soil, notwithstanding our wasteful methods. But American competition, after first causing great depression, has at length created a remarkable agricultural revival in Europe. Governments have afforded powerful aid through the Departments or Ministries of Agriculture. Subsidies have been granted, prizes offered, agricultural academies and colleges founded, and free lecture courses established. By every means the people are being instructed and encouraged; and their new activity is manifested in the co-operative agricultural societies which are rapidly multiplying on the continent. Some 6,500 such societies have been formed in France and 7,200 in Prussia. It is said that in Denmark there is now a co-operative dairy in every parish.

Our American agriculture must certainly be more intelligent if it is to retain its markets, but the attempt to stop the exodus from the country by better farming will prove worse than futile. Intelligent farming succeeds because a given amount of effort when intelligently directed produces greater results. Inasmuch, then, as the amount of food which the world can consume is limited, the more intelligent farming becomes the larger will be the number of farmers driven from the country to city.

Of course population will increase; but increased population by reason of improved methods is likely to keep pace with it for many years to come. Good judges tell us that our present agricultural product could be doubled without any increase of acreage under cultivation, simply by reasonably good methods.

It has been pointed that the world's demand for food is necessarily limited. This fact places a natural limit to the number of men who can successfully devote themselves to producing the food supply; but there is no such natural and necessary limit to the world's consumption in other directions. In palaces and gardens, in furniture and equipages, in dress and ornaments, in paintings and statuary, the purse sets the only limit of expenditure. If the world were a thousand times as rich as it is, it could spend a thousand times as much as it does on such objects; it could consume but little more food.

This harmonizes perfectly with what is known as Engel's economic law. Dr. Engel, formerly head of the Prussian Statistical Bureau, tells us that the percentage of outlay for subsistence grows smaller as the income grows larger; that the percentage of outlay for rent, fuel, light and clothing remains the same, or approximately the same, whatever the income; and that the percentage of outlay for sundries becomes greater as income increases. —North American Review.

At a recent sale of yearling Thoroughbred horses at Doncaster, Eng., some high prices were realized. Sir Tatton Sykes obtained over \$70,000 for 14 colts and fillies. Colts by St. Simon fetched good figures, one selling for \$17,000 and another one being knocked down at \$11,400. A filly by Bend Or was sold for \$8,500.

A horse-breaking machine has lately been invented, and an ingenious system for training horses has now come into use. In the centre of a large round building a horizontal wheel is set up. Long shafts are attached, and the horses are harnessed to them, after the manner of a merry-go-round. The trainer sits in the middle, and drives his circular team, one of which is always a thoroughly broken horse, which sets the pace and keeps the others in check.

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Manitoba Milling, Past and Present

Now that Manitoba flour is being exported by train loads and ship loads to far distant Australia, it becomes interesting to revert to the not far distant past and contrast our present achievements with the conditions with which a not very ancient resident of the old Red River settlement was familiar. We find that oats were sown at Pembina in 1806 and barley in 1812, and when, by the efforts of Lord Selkirk, the first instalment of the evicted Sutherland Highlanders was brought out from Kildonan, the first seed wheat was brought from England very shortly after. The "old Red River" wheat that for some years has figured in the crop reports from the western experimental farms is a direct descendant from those early importations of seed by way of Hudson's Bay. It is not improbable that the original seed was white and got gradually acclimated. Joseph Charette, one of the oldest and most intelligent French settlers at St. Norbert, says that he got his seed wheat some-

Kildonan, but the west side had wind-mills. One introduced in 1864 had a capacity of 25 bushels a day. The hand mill could only grind five bushels a day. It is stated that Andrew McDermott in those early days brought in a steam grist mill from New York by way of St. Paul. He and his son-in-law, the late A. G. B. Bannatyne, by their enterprise in this and other ways, did much to burst the monopoly till then enjoyed by the Hudson's Bay Co. In 1876 the Hudson's Bay Co. and McMillan Bros. erected the mills so well known to the later generation of Winnipeggers, and it is said that so late as 1881 only 270,000 bushels were available for grinding. The Ogilvie mill at Point Douglas was completed in 1882. It is the same building as we now see, though more recent additions have been made. Five years later the Keewatin Milling Co. attracted by the enormous motive power there going to waste, put up their strongly built and splendidly equipped mill and elevator, and are now formidable business rivals to the great parent firm in which most of its managers started their business career. At

ted internally four years ago, and has this year been again overhauled with a view to bringing every detail of its equipment up to the highest pitch of efficiency. Besides the mill proper, there is an elevator of 350,000 bushels capacity and flour storage for 75,000 bags. A considerable quantity of wheat is bought at the mill itself, farmers coming in with loads, often from places 40 miles away, but the company has elevator space located at all the best wheat growing points. Sinteluta, at which a lot of excellent grain is bought, being the western limit. Neepawa, with a 58,000 bushel capacity, is the largest purchasing elevator. Following it in descending order are Emerson, Altona, Gretna, Morris, Morden, Boissevain, Carman, Cypress River, Holland, Methven, Midway, down to a little 4,000 bushel warehouse at Pierson. The total capacity of its 45 local elevators is 1,275,000 bushels, and it may be set down as a settled thing that wherever choice milling wheat is raised there the Ogilvie Co. either has now, or soon will have, an elevator and a purchasing agency.

A dozen or more years ago, when the



thing like 60 years ago from John "Ancaster," as he called the father of our present Sheriff Inkster, and from the description given of it, both by him and other old settlers, it would appear that the parent seed was whiter and much more starchy than its descendant, as now known to us, has become through climatic causes. The milling appliances of these early days form an equally interesting contrast to our highly elaborated roller mill system. The hand quern now in the possession of the Historical Society is an example of the most primitive variety of grinding equipment. It consists of two round flat stones, the under one with a pin in the centre, the upper with a hole through it, and pins in the top by which it could be turned on the pivot fixed in the under stone. The grain was fed through the centre hole in small handfuls, the ground grain making its way out toward the edges as the upper stone was turned by hand on the lower. By and by larger and more powerful stones were introduced. Some of them may still be seen lying round the older homesteads. A waterpower dam still is seen in east

various likely points within the province of Manitoba smaller merchant mills have been built, and others of still more modest pretensions have been put up gradually by the aid of local bonuses, but so perfect is the business organization of the two larger companies that they can compete very closely even in local markets with their humbler rivals. Besides buying for their own use as millers, both of the great milling companies buy extensively for sale both to eastern millers and for export. The Keewatin Milling Co., with its 2,500 barrel equipment and western mill at Portage la Prairie, equal to 800 barrels more, is the biggest concern in the west, but the old Ogilvie Co. has mills in the east which, with its Winnipeg representative, aggregate to 8,500 barrels per day.

The Ogilvie mill at Winnipeg, now equal to 2,000 barrels a day, is the largest within the province, and it is a worthy representative of the modern front rank roller mill. It stands six stories high, and so great has been the advance in fine milling since it was built, only 15 years ago, that it had to be pretty nearly refit-

present writer was trying to penetrate the mysteries of wheat growing, grading and grinding, Captain Clark, then Dominion grain inspector at Winnipeg, said to him: "Noo, let me tell ye, and dinna ye forget it, when ye want to ken right about wheat, gang ye to a first-rate merchant miller." It would do no harm to some of our local oracles on wheat grading if they would take a leaf even now out of Captain Clark's book and do the same thing. The fame of Ogilvie's Patent Hungarian has been pretty much built up and maintained on small, thin-skinned wheat grown by Mennonites, who have always got better figures for their ungraded wheat, not always 60 lbs. to the bushel, than was got for heavier but coarser grain raised further west. Till smut came in Mennonite wheat topped the market, and only last season Mennonite wheat was hauled by carloads to one crack wheat centre further west as an aid to the grinding of the local product.

In the Ogilvie mill wheats from different points are blended with a view to a steady outturn of an even grade of Hungarian, and it is in this blending that the

first call is made on the modern milling expert. Even he trusts nothing to chance and not too much even to his own skilled judgment. There is at one point in the elaborate system of appliances by which a bag of flour is produced a locked box, with an automatic appliance for collecting every hour of night and day at which the mill runs a sample of the outturn at that particular time, thus showing whether the wheat fed into the hopper is of suitable proportions and the dressing evenly done. Besides this hourly sample, the watchman is required to collect samples at the intervening half hours. It is one part of the duties of the head miller to test by "doughing" a little of the flour so collected for the purpose of proving the baking strength and color. Separate tests are taken for each, and the quantity and quality of the gluten are proved by the elasticity of the dough. A chemist may by analysis show the exact percentage of gluten and starch in such a sample, but the milling expert finds in this doughing a much readier means to satisfy himself of the quality of the flour he produces. And every day a bag containing an exact aggregate from all these samples is made up and sent south to a baking expert at Minneapolis, who contrasts its baking strength, color and crispness with a similar sample from a dozen other leviathan mills congregated round St. Anthony falls. Each day's report shows the details for both patents and strong bakers' flour out of each of these mills, but the names are withheld so that each contributor to this testing arrangement may compare his own with the others, while kept in darkness as to the origin of the contrasting samples. It is the business of the head miller to so control the supply and all the subsequent details of management as to get the largest proportion of the more valuable patents the grist will yield, while at the same time taking the greatest possible total of marketable flour, one-half of which ought as a general thing to be of patent grade.

Let us now turn back and see, as far as the uninitiated eye can, how this result is reached. The wheat being properly cleaned in the first place, and a mixture decided on which will have the necessary proportion of gluten and starch to turn out a loaf with good baking strength, good rising power, and nice creamy color, the wheat is run from the hopper into revolving brass cylinders, inside of which it is damped and warmed to from 90 to 100 degrees. Steam jets are the means employed at this stage, and the toughened bran is at the next stage peeled off without getting broken into small fragments that could at a later stage help to discolor the flour. The grain is next fed between finely grooved steel rollers, by which it is gradually reduced to flour, which again is sifted through fine silk specially manufactured in Switzerland, and the coarser parts are returned to be re-ground to the necessary fineness. The finished flour of different grades falls in a continuous stream through spouts, on which bags are fixed and taken away as they are filled by a set of attendants, who weigh and stitch up the bag, to be in due course carried to the storage building. All the grinding and sifting is done inside of machinery so closely fitted that almost nothing can escape, and the work goes on night and day, every process being practically automatic, though always ready of access to the operator in charge.

It would be tedious and impossible by any mere verbal description to give even an approximate idea of the extent and perfection of the processes by which a first-class modern mill such as this is run. Every separate item represents the newest and best achievement of mechanical science in its own line, and when actually at work the whole grinding and sifting

processes are so tightly covered in that only the results in the shape of finished flour can be seen. At the same time everything is under such complete control that the whole or any part could be brought to a stand in a few seconds. Even when at work so smoothly and quietly does everything run that this huge combination, grinding at the rate of 10,000 bushels a day, makes no more noise than a farm chopping mill. Only a steady hum is heard, and the swift motion of the belting is the main evidence of the amount of work that is going on.

The motive power for the whole is supplied by half a dozen boilers, equal to 1,000 horsepower, and the milling machinery is worked by a 600 horsepower engine, with a 24-foot fly wheel running a 36-inch belt at the rate of 76 revolutions a minute. A second engine does all the elevator work, from the car on through the cleaning and preparation of the grain and its final disposition when ground in the storage warehouses. A third of 35 horsepower generates electricity for the 500 lights with which the whole establishment is fitted.

It need hardly be added that in addition to the great investment of capital which this splendid mill and its tributary elevators represent, there must be very high business aptitude, and the most perfect skill in their several departments, from the head miller down to the men who bag and store the finished product. At the time, now well on to 10 years, when Mr. F. W. Thompson took the management of the whole western end of the Ogilvie's milling system, he looked, and was perhaps, the youngest man to be found on this continent filling a position of such importance. But this is a country for growing men, and one striking feature of the Ogilvie's great business here in the west is the youthful appearance of nearly all its most trusted employees. They came here to grow up with the country, and have certainly grown to very good purpose.

A Hot Day in Australia.

It was more like a revelation from another world yesterday than a phenomenally hot day, for when morning broke the town was literally a huge oven, over which the skies hung inverted in flaming sheets of brass. The streets were yellow tornadoes of whirling dust, whilst waves of heat, that seemed almost visible, met the discomfited wayfarer everywhere; and very early in the day many people emphatically professed to have solved the problem of whether life was worth living. The wind was from the north, and the heat from everywhere, and towards 7 o'clock the rays of the sun, which could only now and then be seen, showing fiery red from the blinding haze that enveloped it, beat down still more fiercely. At that hour the thermometer registered 103 degrees of heat in the shade, whilst in the sun the mercury showed 148 degrees. The wind was raging along with great velocity, and when matters were at their most unendurable pass the force of it was registered at 55 miles an hour.

In the fiscal year ended on July 1, 1897, there were killed in Montana 26,156 wolves and coyotes. The state paid a bounty of \$3 each, making \$78,468, and the counties, in most cases, paid \$5 more, making about \$175,000 paid out by the public for the slaughter of these pests during one year. Wolves are reported to be more plentiful in Montana to-day than they have been for years, and the bounty is likely to prove a serious drain on the resources of the state.

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Western Harvest Notes.

W. J. Fraser, of Franklin, sold 1,100 bushels of his new crop at 82c.

C. E. Hall, of Alexander, has threshed his crop of 1,000 acres, which averaged 17 bushels.

As an example of the lively demand for wheat, Souris started with eight wheat buyers on the market.

T. McGregor, of Wellwood, threshed 1,156 bushels of wheat on Monday afternoon at the farm of John White.

A threshing machine at work on the farm of S. S. Simpson, a well-known farmer south of Roseland, was burned together with a considerable quantity of wheat.

A farmer in 3-7 has a daughter 15 years old who has cut 145 acres of crop with a binder, and has also helped with the haying during the present season.—Manitou Mercury.

A new sidetrack has been erected midway between Winnipeg and La Salle, to accommodate the farmers in the neighborhood and afford them facilities in shipping their grain.

J. Harvey, Indian Head, has threshed out 4,800 bushels of wheat from a 160-acre stubble field burnt over last spring. The same field last year, put in on fallow, gave 40 bushels to the acre.

Mrs. McCormick, of Indianford, who lost her husband and eldest son during the past year, has illustrated what a woman can do by cutting 100 acres of crop and assisting in the stacking.

Ocean freight rates for grain are reported strong and advancing. Eight cents per bushel is now being asked from New York to Liverpool, England. The through wheat rate from Chicago to Liverpool is 16.65 cents per bushel.

We were pleased to receive a call from James Elder, of Virden, the past month. He reports an average of about twenty bushels of wheat to the acre north of Virden, but considerably lighter in the south.

According to the record at the Indian Head Experimental Farm the past summer has been the longest growing season on record. The latest date for the first fall frost before was September 7th. This year it was two days later.

A cowardly trick has been played on a threshing outfit at Glenboro. The belting was cut into pieces, thus robbing the owners not only of their property but bringing the work to a standstill till the new belt could be bought.

Griswold boasts, among others, of the following big yield: G. A. Trumpour heads the list with 6,000 bushels of No. 1 hard off 210 acres. Allan Young had 10,000 bushels, all of which graded No. 1 hard, and William John Young had 10,000 bushels.

J. E. Gayton, Manitou, has this year the finest crop of oats he has ever raised. Banner oats are his main crop, but he boasts especially of the new Lincoln, a variety of which he got the seed from Montreal. The heads are large and heavy and a choice sample of grain.

In the Souris district Hall Bros.' gang threshed 2,002 bushels of wheat at Wm. McCulloch's farm on Wednesday. On Tuesday they put 1,350 through the machine from ten o'clock. The first quarter section threshed at Mr. McCulloch's went between 19 and 20 bushels to the acre.—Plaindealer.

Mr. Buchanan, of 2-9, (south of Manitou) has 250 acres of wheat this season which it is expected will average 25 bushels per acre. If his expectations are realized, Mr. Buchanan will gather 6,250

bushels of grain. This, at 75 cents per bushel, counts up to the very respectable sum of \$4,687.50.

Rumors have been current for a few days past of a wonderful wheat yield on the farm of T. Webb, at Clearwater. One informant places it at 39 bushels to the acre, or 783 bushels off twenty acres, while another is a little more modest and places the yield in question at twenty-five bushels to the acre. Next.—Pilot Mound Sentinel.

The city of Bristol has resolved to build the first elevator in England for the accommodation of vessels landing foreign grain at Avonmouth dock. It will hold 600,000 bushels. The Manchester and Salford Docks Warehouse Co. will also build a grain warehouse to hold 40,000 tons of grain. The contract has been let to a Chicago firm.

A. J. Cotton, of Treherne, has threshed from 475 acres over 12,350 bushels of No. 1 hard wheat. The yield on the whole field averaged 26 bushels to the acre. In addition to this, Mr. Cotton succeeded in marketing quite a large bulk of the grain early in the season, and will realize from it about \$9,500. He will clear by the crop \$6,000 or \$7,000 for his year's work.

A Welwyn correspondent writes: "The heavy storm of the 14th inst. is proving a blessing in disguise. By giving the ground such a heavy soaking it is causing the seeds of foul and noxious weeds (which are very numerous this year) to come up, and jack frost is certain to give them a black eye and gain the victory, giving the farmers the prize money."

The highest price of wheat in London for a hundred years was in 1801, when it reached \$3.63 per bushel; nor did it fall below \$2 per bushel from 1795 until 1821, except in five years. Wheat never reached a lower figure than \$1 per bushel in London until 1885, when the average price for the year was 96 cents. In 1891 it again reached the dollar mark, and again this year.

H. C. Gilmour, Sr., of Buffalo Lake, from 22 acres of summer fallow, had a yield of 32 bushels per acre. Fifteen acres of stubble were also threshed and yielded 25 bushels per acre. Mr. Gilmour had 80 acres under crop this year, and the remaining 40 odd acres are summer fallow, and will yield over 30 bushels per acre. All the grain is a good sample of No. 1 hard.

Statistician Hyde of the Department of Agriculture, Washington, D. C., says that the wheat crop in Europe is this year short 113,000,000 bushels, based on the average for the last five or six years. He says that wheat will not be materially cheaper until there is another good crop in sight. Europe must have wheat, he says, and about the only place she can get it is in the United States.

A Boissevain farmer has sent in to the Department of Agriculture a sample of the way in which wheat screenings are ground there so as to destroy the vitality of the noxious weeds in them. This sample shows that the so-called grinding is a fraud; the grain is only hashed, and it also shows a very limited amount of foul seeds compared with hundreds of samples in the country.

The Saltcoats, Assa., Siftings says:—"Two new threshing outfits have been purchased by Geo. Albright and David Mundie respectively.—Implement men have been rushed lately, new binders going out by the dozen.—The Northern Elevator Co. have purchased the grain warehouse lately owned by John Brown, and have been overhauling it, preparatory to the opening of grain buying.

As many of our readers are no doubt following the market quotations of wheat

with considerable interest just now, we subjoin freight rates per bushel on wheat to various points on the main line of the C. P. R. These will be found useful in comparing prices paid here with those at other points: Burnside to Brandon, 19c.; Kemnay to Griswold, 20c.; Oak Lake to Broadview, 21c.; Oakshela to Qu'Appelle, 22c.; McLean to Moose Jaw, 23c.

The largest crops ever grown in Colchester, Assa., are being garnered in. Mr. Heyden and Mr. McLaggan lead with 200 and 150 acres. The wheat and most of the oats were cut before any frost came, but some late sown grain remains to be cut yet, and this is where the tardy farmers come in on the heat of the hunt, get their crops frozen and blame the country for being no good to grow grain. This is indeed a banner year for Alberta.

The McMillan elevator at Emerson has been burned down, believed to be caused by defect in the engine room. Several cars just loaded on the track were with difficulty saved, but nearly 10,000 bushels in the elevator were burned. The wheat in the building was mostly stored grain owned by several farmers around Emerson. The following is an approximately correct account of the amounts owned by the different parties: Geo. Christie, 2,000; John Spencer, 1,500; Fraser & Sons, 1,100; Gavin Ross, 150; John Collins, 200; Ken McRae, Jr., 100; Nat. McRae, 100; Wm. Robinson, 150.

It will be noticed that the threshing machinery now used in Manitoba is much superior to that with which grain was threshed a few years ago. Not only are the separators much improved but the fine traction engines which move themselves and the entire outfit from one point to another are miracles of strength, ingenuity and utility. The machines used in former years were continually breaking down, were slow, cumbersome and unsatisfactory in every way. The only improvement now required in the modern steam thresher is something that will lessen danger from fire.—The Western Prairie.

And Salt is Cheap.

Salt puts out a fire in the chimney.

Salt in the oven under baking tins will prevent their scorching on the bottom.

Salt and vinegar will remove stains from discolored teacups.

Salt and soda are excellent for bee stings and spider bites.

Salt thrown on soot which has fallen on the carpet will prevent stain.

Salt put on ink when freshly spilled on a carpet will help in removing the spot.

Salt in whitewash makes it stick.

Salt thrown on a coal fire which is low will revive it.

Salt used in sweeping carpets keeps out moths.—Record.

A proposal has been made to get up a Leicester flock book as a help to foreign sales more particularly. Discussing this, Lord Polwarth, whose flock is 100 years established and at the very top of the breed, says:—"Everyone knows that it is the concentration of blood which renders the Merton rams so impressive as sires. I have only endeavored to maintain the vigor and constitution, combined with the purity of blood in the flock, which it had when I succeeded to its management. Lastly, it would be a mistake to expect a great deal from the establishment of a Flock Book. It may facilitate foreign trade, but if it causes home breeders to rely too much on paper pedigree it will do harm. Written pedigrees are useful to those who know how to use them, but the study of the living animals, both individually and in their parentage as far back as you can, is of greater consequence."

Kildonan and St. Paul's Show.

This society held its annual show at the Indian Industrial school, on Sept. 28th and 29th. The inside display of garden produce especially was up to high water mark, the farmers not any behind the professionals. Cattle, a large turnout. Dairy produce, full display and choice. Thos. McIntosh had W. S. Lister's silver cup for the best collection of farm produce.

PRIZE LIST.

Horses, light breeds—Stallion, any age, 1 H. Gunn, 2 McDonald. Foal, 1897, 1 Henderson, 2 Gunn. Colt or filly, 1 year, 1 Henderson. Colt or filly, 2 years, 1 Henderson. Colt or filly, 3 years, 1 Taylor, 2 Ayearst. Single driver in harness, 1 McBeth, 2 Rev. A. S. White, 3 Henderson. Saddle horse, over 14 hands, 1 McBeth, 2 White, 3 Emes. Saddle pony, under 14 hands, 1 McBeth. Gentleman rider, 1 Emes, 2 McBeth. Lady rider, 1 Mackay, 2 Pritchard. Boy rider, 1 Pritchard, 2 McBeth. Girl rider, 1 Pritchard. Lady driver, H. W. Matheson. Gentleman's turnout, 1 White, 2 Henderson. Carriage team, 1 McLeod, 2 Murray, 3 Matheson. Foal, 1896, 1 McDonald. Colt or filly, 1 year, 1 and 2, Ayearst. Colt or filly, 2 years, 1 Taylor, 2 Ayearst. Team to wagon, 1 Ayearst. Team to wagon, over 2,700 lbs., 1 Bell, 2 Toshack, 3 Taylor.

Cattle—Grade—Bull, aged, W. S. Lister. Bull, 2 years old, 1 W. S. Lister. Bull calf, 1 year, H. O. Ayearst. Cow, 3 years, 1 and 2, H. O. Ayearst. Heifer, 2 years, H. O. Ayearst. Heifer, 1 year, H. O. Ayearst. Heifer calf, 1 year, H. O. Ayearst. Herd, bull and 3 females, H. O. Ayearst. Cattle—Pure Bred—Bull, 3 years, 1 P. Garvin, 2 J. Garvin. Cow, 3 years, 1 Garvin, 2 Mackay. Heifer, 2 years, Mrs. Hamsworth. Heifer, 1 year, Garvin. Calf, 1 year, Mrs. Hamsworth. Herd, bull and 3 females, Garvin. Grade Cattle—Cow, 5 years or over, 1 and 2 Ayearst, 3 Bell. Cow, 3 years, 1 and 2, Ayearst, 3 Gunn. Heifer, 2 years, 1 and 2, Gunn. Heifer, 1 year, 1 Ayearst, 2 Clouston. Calf, 1 year, 1 Taylor, 2 Ayearst. Heifer calf, 1 Taylor. Fat cow, 1 Bell, 2 Garvin. Four females, 1 Ayearst, 2 Gunn, 3 Bell. Oxen, 1 Clouston.

Pigs, Grade—Sow, with litter, 1 Hoddinott, 2 Gunn. Sow, over 1 year, 1 Gunn, 2 Hoddinott. Sow, 1 Taylor. Fat pig, 1 Hoddinott, 2 Taylor, 3 Gunn. Pair of pigs, 1 and 2, Hoddinott, 3 Gunn. Sow, under 6 months, 1 and 2, Hoddinott, 3 Gunn. Pigs, any pure breed—Boar, 1 year, 1 Gunn, 2 Taylor. Boar, aged, 1 Gunn, 2 Taylor.

Poultry—Trio Houdans, over 1 year, Charles Midwinter. Trio Houdans, chickens of 1897, 1 and 2 C. Midwinter. Trio Leghorns, over 1 year, 1 C. Midwinter, 2 W. H. Tomalin, 3 M. Harper. Trio Plymouth Rock chickens of 1897, M. Harper. Trio Minorca chickens of 1897, C. Midwinter. Trio Minorcas, over 1 year, C. Midwinter. Pair geese, over 1 year, 1 and 2 C. Midwinter, 3 B. McDonald. Pair goslings, under 1 year, 1 and 2 C. Midwinter, 3 J. R. McDonald. Pair turkeys, under 1 year, 1 and 2 C. Midwinter, 3 W. C. Pritchard. Pair turkeys, old, 1 C. Midwinter, 2 Alex. Gunn. Pair ducks, 1 year, C. Midwinter. Pair dressed chickens, 1 and 2 D. McIvor. Pair rabbits, C. Midwinter. Pair guinea fowls, 1 and 2 C. Midwinter.

Dairy Products—Home made cheese, 1 H. W. Matheson. 40 lbs. tub butter, 1 Mrs. J. H. Gunn, 2 Mrs. E. M. Pritchard, 3 John McLeod. 26-lb. crock or tub, 1 Mrs. W. C. Pritchard, 2 Mrs. J. H. Clark, 3 Mrs. J. R. McDonald. 10-lb. rolls or prints, 1 W. C. Pritchard, 2 H. O. Ayearst, 3 D. W. McIvor. 5-lb. rolls or prints, 1 Mrs. J. H. Gunn, 2 Mrs. Ayearst, 3 Mrs. W. C. Pritchard, 3 lbs., in prints, 1 Mrs. J. H. Gunn, 2 Mrs. Ayearst, 3 Rupert's Land Industrial School. Sweepstakes, 1 Mrs. W. C. Pritchard. 8-lb. rolls or prints, (special), 1 Mrs. W. C. Pritchard, 2 Mrs. Ayearst, 3 J. Gunn. Greatest number of prizes (special), Mrs. J. Gunn.

Agricultural Products—No. 1 hard wheat, 1 R. R. Taylor, 2 H. O. Ayearst. Any variety of wheat, 1 Taylor, 2 Ayearst, 3 Bell. Six-rowed barley, 1 Ayearst, 2 Bell, 3 McIvor. Peas, 1 A. Bannerman. White oats, 1 Taylor, 2 McIvor, 3 Bell. Black oats, 1 Henderson. 12 ears corn, 1 J. R. McDonald. Banner oats, 1 Taylor, 2 Hen-

derson, 3 McIvor. Collection of grain, 1 Taylor, 2 Ayearst, 3 McIvor. Flax, 1 Bannerman, 2 C. Murray.

Roots and Vegetables (open to gardeners)—Early Puritan potatoes, 1 W. H. Tomalin, 2 McIntosh. Early Rose potatoes, 1 Farmer, 2 Attridge. Beauty of Hebron, 1 Tomalin, 2 Attridge. Any variety of potatoes, 1 Farmer, 2 McIntosh. Swede turnips, 1 Midwinter, 2 Mackay. Mangel wurtzels, 1 Whelans, 2 Mackay. White carrots, 1 Mackay, 2 Whellans. Sugar beets, 1 Tomalin, 2 McIntosh. Pumpkins, 1 Tomalin, 2 McIntosh.

Field Roots (open to farmers)—Early Puritan potatoes, 1 Harper, 2 McIvor. Early Rose potatoes, 1 E. M. Pritchard, 2 Ayearst. Beauty of Hebron, 1 Harper, 2 Ayearst. Any variety of potatoes, 1 Taylor, 2 Harper. Swede turnips, 1 Ayearst, 2 Taylor. Mangel wurtzels, 1 Ayearst, 2 McIvor. Red carrots, 1 McDonald. White carrots, 1 McDonald. Mammoth squash, 1 McDonald. Sugar beets, 1 Taylor, 2 McDonald. Pumpkin, 1 McIvor.

Garden Vegetables (open to gardeners)—Intermediate carrots, 1 Mackay, 2 Farmer. Short carrots, 1 Farmer, 2 McIntosh. Red onions, 1 Tomalin, 2 McIntosh. White onions, 1 Tomalin, 2 T. McIntosh. Yellow onions, 1 McIntosh, 2 Mackay. Pickling onions, 1 Tomalin, 2 McIntosh. Turnip beets, 1 Mackay, 2 Midwinter. Blood beets, 1 Farmer, 2 McIntosh. Rhubarb, 1 McIntosh, 2 Midwinter. Parsnips, 1 McIntosh, 2 Farmer. White turnips, 1 Midwinter, 2 McIntosh. Yellow turnips, 1 McIntosh. Tomatoes, 1 McIntosh, 2 Farmer. Peppers, 1 McIntosh, 2 Farmer. Cucumbers, 1 Mackay, 2 Farmer. Citrons, 1 Farmer, 2 McIntosh. Summer squashes, 1 McIntosh, 2 Farmer. Winter squashes, 1 McIntosh, 2 Mackay. Vegetable marrow, 1 Tomlin, 2 McLeod. White Plume celery, 1 McIntosh, 2 Midwinter. Pink Plume celery, 1 McIntosh, 2 Midwinter. Early cabbage, 1 Farmer, 2 McIntosh. Winter cabbage, 1 McIntosh, 2 Farmer. Savoy cabbage, 1 McIntosh, 2 Whellans. Any variety of cabbage, 1 McIntosh, 2 Farmer. Scotch kail, 1 McIntosh, 2 Farmer. Pickling cabbage, 1 McIntosh, 2 Mackay. Cauliflower, 1 Tomalin, 2 Whellans. Parsley, 1 McIntosh, 2 Midwinter. Six ears sugar corn, 1 Mackay, 2 Farmer. Winter radishes, 1 Tomlin, 2 McIntosh. Collection savory herbs, 1 Midwinter, 2 McIntosh. Leeks, 1 McIntosh, 2 Farmer. Salisfy, 1 Farmer, 2 Midwinter. Water-melons, 1 Tomalin. Muskmelons, 1 Farmer. Any variety of potatoes, 1 Whellans, 2 McIntosh.

Vegetables (open to farmers and gardeners)—Best collection of roots and vegetables, silver cup and special, 1 Thomas McIntosh, 2 W. A. Farmer. Six carrots, 1 McDonald, 2 Fraser. Twelve yellow onions, 1 Bell, 2 Harper. Red onions, 1 Frazer, 2 Bell. Gallon of pickling onions, 1 McDonald, 2 Taylor. Turnip beets, 1 Brazier, 2 Mrs. W. C. Pritchard. Parsnips, 1 McDonald, 2 Brazier. Turnips, 1 McDonald, 2 Pritchard. Tomatoes, 1 Brazier, 2 McDonald. Cucumbers, 1 Brazier, 2 McDonald. Vegetable marrows, 1 Harper, 2 McLeod. Heads celery, 1 Brazier, 2 Taylor. Winter cabbage, 1 Eams, 2 Brazier. Red cabbage, 1 Emes, 2 McDonald. Cauliflower, 1 Harper, 2 Brazier. Parsley, 1 McDonald, 2 Taylor. Sugar corn, 1 Harper. Radishes, 1 Harper. Any new variety of potatoes, 1 Harper, 2 Emes. Collection of roots and vegetables, not more than ten varieties, named, and two of each, 1 McDonald, 2 Taylor.

In another part of this issue will be found the advertisement of closing out sale of dairy cattle by Jas. Cochrane, Crystal City, so well known as a successful breeder of prize Ayrshires. The herd includes 2-year-old bull, Smythe, twice 2nd at Winnipeg; cow, Maud, 1st prize and champion dairy cow with three of her offspring. This very choice herd should have the attention of every one interested in good dairy cattle. At the local fall fairs Mr. Cochrane has surprised the natives by the work done with his World's Fair Washer and Wringer. At Clearwater he washed the blacksmith's towel smeared with coal tar and oil, taking, before the fair closed, eight orders on the strength of his performance.

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Hamiota Show.

This was the fifth show here, and in spite of the busy season the display was good and attendance large. One or two well-known breeders, such as Geo. Rankin and J. Riddell were absent, but the prize list shows a good amount of competition, and stock of high excellence.

PRIZE LIST.

Heavy Draught Horses—Team, 1 H. W. Gray. Two-year-old mare or gelding, 1 Jas. Smith. Foal of 1897—1 D. White, 2 John Burr.

Agricultural Horses—Brood mare, raised foal in 1897, 1 Jas. Howie, 2 J. E. Morgan. Team, 1 W. J. Cowan, 2 C. Smith. Two-year-old mare or gelding, 1 Thos. Hamilton, 2 T. Jasper. One-year-old mare or gelding, 1 S. Fennell, 2 Isaac Sararas. Foal of 1897, 1 J. E. Morgan, 2 James Howie.

General Purpose Horses—Brood mare, raised foal in 1897, 1 T. Jasper. Team, 1 T. Jasper, 2 J. Anderson. Two-year-old mare or gelding, 1 J. E. Morgan, 2 A. Smith. One-year-old mare or gelding, 1 John Brown. Foal of 1897, 1 T. Jasper, 2 John Brown.

Roadster and Carriage Horses—Brood mare, raised foal in 1897, 1 Geo. Norton, 2 Jno. Collis. Team of roadsters or carriage, 1 Jere Lelond, 2 Wm. Smith. Single roadster or carriage, 1 Jas. Warren, 2 J. McLean. Saddle horse, 1 Alex. McLean, 2 W. J. Helliwell. Two-year-old mare or gelding, 1 D. White, 2 John Scott. One-year-old mare or gelding, 1 D. White, 2 J. E. Morgan. Foal of 1897, 1 John Collis, 2 J. E. Morgan. Matched team, special by Armstrong & Basler, 1 Wm. Evans.

Shorthorns—Bull, 3-year-old or over, 1 Joseph Andrew, 2 Geo. Leith. Bull, one year old, 1 A. & J. Chadbourne. Bull calf of 1897, 1 A. & J. Chadbourne, 2 W. J. Helliwell. Cow, aged, raised calf in 1897, 1 A. & J. Chadbourne, 2 W. J. Helliwell. Heifer, two years old, 1 A. & J. Chadbourne, 2 W. J. Helliwell. Heifer calf, 1 and 2, W. J. Helliwell.

Polled Angus—Bull, one year old—1 Geo. Gray. Bull calf of 1897, 1 J. E. Morgan. Cow, aged, raised calf in 1897, 1 Geo. Gray.

Holsteins—Bull, one year old, 1 Thos. Walker. Cow, aged, raised calf in 1897, 1 Thos. Walker. Heifer, one year old, 1 Thos. Walker.

Ayrshires—Bull, three years old and over, 1 D. White. Cow, aged, raised calf in 1897, 1 D. White. Heifer, two years old, 1 D. White. Heifer, one year old, 1 D. White. One male and four females, 1 A. & J. Chadbourne.

Grade Cattle—Cow, aged, raised calf in 1897, 1 Geo. Leith, 2 Geo. Gray. Heifer, two years old, 1 A. Smith, 2 Geo. Leith. Heifer, one year old, 1 A. Smith, 2 Geo. Leith. Steer calf, 1 A. D. McConnell, 2 Geo. Gray. Beef, fat steer, cow or heifer, 1 A. Smith, 2 Wm. Hern. Heifer calf, 1 A. Smith, 2 Geo. Gray. Herd grade cattle, 4 females, 1 A. Smith, 2 Geo. Leith.

Long Wool Sheep—Aged ram, 1 Wm. Hern, 2 Wm. Hedley. Shearling, 1 Wm. Hedley. Pair aged ewes, 1 and 2, Wm. Hedley. Pair shearling ewes, 1 and 2, Wm. Hedley. Pair ewe lambs, 1 and 2, Wm. Hedley. Ram lamb, 1 and 2, Wm. Hedley. Pen sheep, any breed, 1st special by John Riddell, 1 Wm. Hedley, 2 W. J. Helliwell.

Short Wool Sheep—Aged ram, 1 W. H. Paddock, 2 W. J. Helliwell. Shearling, 1 T. Jasper, 2 W. J. Helliwell. Pair aged ewes, 1 W. J. Helliwell, 2 W. H. Paddock. Pair shearlings, 1 T. Jasper, 2 W. J. Helliwell. Pair ewe lambs, 1 W. J. Helliwell, 2 W. H. Paddock. Pair ram lambs, 1 and 2, W. J. Helliwell. Pair fat sheep, 1 W. H. Paddock, 2 T. Jasper.

Hogs, any breed except Berkshire—Aged boar, 1 John Bray. Boar of 1897, 1 and 2, John Bray. Sow, aged, 1 John Bray. Sow of 1897, 1 and 2, John Bray. Aged sow, with litter at side, special by A. E. Brown, 1 John Bray.

Berkshire—Aged boar, 1 D. A. Robertson, 2 Wm. Lelond. Boar of 1897, 1 and 2, D. A. Robertson. Sow, aged, 1 D. A. Robertson, 2 Wm. Lelond. Sow of 1897, 1 Wm. Lelond, 2 D. A. Robertson.

Poultry—Pair geese, 1 Wm. Lelond, 2 Wm. Leary. Pair ducks, 1 Wm. Lelond, 2 Wm. Smith. Pair bronze turkeys, 1 Wm. Lelond, 2 Joseph Andrew. Pair common turkeys, 1 A. E. Brown.

Pair leghorns, any variety, 1 John Bray, 2 Colin McMurchy. Pair buff cochins, any variety, 1 W. J. Helliwell, 2 A. E. Brown.

Broadview Show.

The 14th annual show of this society was held on Sept. 24. Pedigree cattle were a good feature, but the total number of entries shows a serious falling off from previous years, and the general interest also waning.

PRIZE LIST.

Heavy Draught Horses—Stallion, 1 John McDonald. Team, in harness, 1 John McDonald. Brood mare and foal, 1 F. Armstrong, 2 Fred. Cunningham. Mare or gelding, 3 years or over, 1 Joseph Callin, 2 Fred. Cunningham. Filly or gelding, 2 years, 1 D. Cunningham. Filly or gelding, 1 year, 1 D. Cunningham. Foal of 1897, 1 F. Armstrong, 2 F. Cunningham.

General Purpose Horses—Team in harness, 1 A. Tulloch, 2 J. Cope. Brood mare, with foal, 1 D. McGregor, 2 Wm. Fall. Mare or gelding, 3 years and over, 1 W. Wilde, 2 R. Hillhouse. Filly or gelding, 2 years, 1 F. Armstrong, 2 John McDonald. Filly or gelding, 1 year, 1 and 2, W. Fall. Foal of 1897, 1 D. McGregor, 2 J. Cope.

Roadsters—Team in harness, 1 W. Dixon. Mare, with foal, 1 W. Dixon. Filly or gelding, 2 years old, 1 and 2, J. Crull. Filly or gelding, 1 year old, 1 J. Cope, 2 Dr. Allingham. Foal of 1897, 1 W. Dixon, 2 D. McGregor. Single horse in harness, 1 J. Crull, 2 Dr. Allingham. Saddle horse, 1 C. Dermody, 2 Dr. Allingham.

Thoroughbred Cattle—Bull, 1 year and over, 1 R. Hillhouse, 2 J. Cope. Bull calf, 1 W. Mayhew, 2 R. Hillhouse. Cow, giving milk, 1 and 2, R. Hillhouse, 3 R. Robinson. Cow, in calf, 1 R. S. Park, 2 W. Dixon. Heifer, 2 years old, 1 W. Fall, 2 R. Robinson. Yearling heifer, 1 W. Mayhew, 2 R. Hillhouse. Heifer calf, 1 Dr. Allingham, 2 Jos. Callin.

Grade Cattle—Bull, any age, 1 Jos. Callin, 2 W. Fall. Cow, in calf, 1 W. Dixon, 2 W. Wilde. Cow, giving milk, 1 J. Cope, 2 W. Fall. Heifer, 2 years old, 1 and 2, R. Hillhouse. Heifer, 1 year old, 1 W. Fall, 2 W. Dixon. Heifer calf, 1 W. Fall, 2 J. McLellan. Steer, 2 years old, 1 W. Dixon. Steer, 1 year old, 1 J. McLellan. Steer calf, 1 J. McLellan. Fat beef animal, 1 W. Dixon, 2 R. Hillhouse.

Pigs (any breed)—Pedigree boar, 1 Wm. Dixon. Pedigree sow, 1 J. T. Gathercole.

Poultry—Pair of Brahmas, 1 D. C. McDonell, 2 W. Wilde. Pair of Plymouth Rocks, 1 R. Robinson, 2 J. Cope. Pair of Leghorns, 1 J. Cope, 2 W. Wilde. Pair of fowls of any other variety, 1 A. Welch, 2 W. Wilde. Pair of Geese, 1 A. Welch. Pair of ducks, 1 C. P. Dermody, 2 J. T. Gathercole. Pair of turkeys, 1 C. P. Dermody, 2 R. Robinson. Pair of guinea fowl, 1 J. T. Gathercole. Pair of pigeons, 1 T. Brownridge, 2 A. Welch.

Grain—Red Fyfe wheat, 2 bushels, 1 J. G. Donaldson, 2 C. P. Dermody. White Fyfe wheat, 2 bushels, 1 R. Robinson, 2 H. McKenzie. White oats, 2 bushels, 1 D. Cunningham, 2 W. Bird. Black oats, 2 bushels, 1 W. Dixon. Barley, six-rowed, 2 bushels, 1 R. Robinson, 2 W. Bird. Barley, two-rowed, 2 bushels, 1 W. Dixon. Field peas, 1 bushel, 1 W. Dixon. Flax, 1 bushel, 1 Joseph Callin. Collection, not less than six kinds of grain, 1 W. Dixon, 2 R. Robinson.

Field Roots—One bushel of potatoes, 1 J. Crull, 2 C. P. Dermody. Six Swede turnips, 1 J. Taylor, 2 Tim Canty. Six mangolds, 1 J. Taylor, 2 Sam Cook. Six long red beets, 1 W. Bird, 2 Mrs. Heron. Six carrots, 1 W. Dixon, 2 Sam Cook. Best collection of field roots, 1 J. Cope, 2 W. Dixon.

Garden Vegetables—Six carrots, intermediate, 1 S. Cook, 2 W. Dixon. Six white carrots, 1 Cook, 2 T. Canty. Six parsnips, 1 Cook, 2 Canty. Twelve red onions, 1 Canty, 2 Cook. Twelve yellow onions, 1 Canty, 2 Cook. Twelve white onions, 1 Canty, 2 Cook. Half gallon multipliers, 1 Mrs. Heron, 2 J. Cope. Three cabbages, 1 S. Cook, 2 J. Taylor. Three red cabbages, 1 Cook, 2 Canty. Three cauliflowers, 1 Canty, 2 J. Crull. Six celery plants, 1 Cook,

2 Canty. Three citrons, 1 Canty, 2 Cook. Collection of garden vegetables, 1 Canty, 2 Cook. Six tomatoes, 1 Canty, 2 Cook. Six cucumbers, 1 Canty, 2 W. Bird.

Dairy Produce—25 lbs. butter, 1 W. Chapman, 2 Robt. White. 5 lbs. butter in rolls or prints, 1 Robt. White, 2 Foster Armstrong. Home-made cheese, 1 Mrs. A. Bell, 2 J. G. Donaldson.

D. Lillies, Rockwood, threshed 1,375 bushels of excellent grain, and sold his wheat for 80c. per bushel.

C. W. Gimby and W. J. Robertson, of Cartwright, have brought over from Langdon two Percheron stallions.

Jas. Mitchell, Castleavery, has sold one young Shorthorn bull to J. Einarson, of Logberg, and another to Mr. Porter, of Bredenbury.

Clem Des Forges, of Carberry, has sold a pig to H. E. Waller which tipped the beam at 615 pounds. Had he fed four to 150 lbs. each, there would have been more money in them.

John Myers, who farms about a mile from Holland, sowed this year about 80 acres with wheat, which produced only 1,400 bushels at 75c., while three years ago the same acreage produced 2,700 bushels at 46 cents. Which, after all, was the most profitable crop?

A. B. Potter, Montgomery, reports a yield of over 4,000 bushels on 165 acres, which includes 2,300 bushels of No. 1 wheat. One 30-acre field went 27 to the acre, and the average was 22 per acre over the crop. Oats went 35, and barley 25 per acre. One load he drew to Wapella made 101 bushels, and sold at 75c.

F. W. Howard, Whitewood, is reported to have raised a fine patch of wheat on breaking from very choice seed. The yield from 10 acres of White Fyfe was 24 bushels an acre, and the weight 65 lbs. If this can be substantiated, it will be the heaviest wheat of the season, Regina red having made 63 at the grain standards meeting, where it stood at the top of the list.

Wilson, Rankin & Co., Brandon, wish to apologize for the delay in the issue of their Fall Catalogue. They expected to have it mailed by Sept. 15th, but owing to delays and accidents in the printing office it has been delayed. It will, however, be mailed this week. We have examined the proofs of it, and can confidently say that it will well pay everyone to procure a copy.

H. McKenzie, of Broadview district, had six horses shot for glanders, and has now lost a seventh from inflammation of the kidneys. We believe a subscription is being raised for his benefit. It would be interesting from a veterinary point of view to try and trace the history of those horses. Did he buy any from a Montana drove or western ranches, and so start the trouble? The purchase of horses that have been driven from an infected district has cost this country very dear.

The government creameries in Alberta are giving entire satisfaction to the patrons. The total amount of butter manufactured during June, July and August was \$9,271 lbs., of which 78,000 lbs., has been shipped to Great Britain and British Columbia markets. A summary of butter made by each creamery is as follows:—Calgary, 9,249 lbs.; Innisfail, 26,115 lbs.; Red Deer, 21,306 lbs.; Wetaskiwin, 12,182 lbs.; Edmonton, 21,419 lbs. The average output of the five creameries is 1,330 lbs. per week.

Some of our agricultural shows have been of first-rate excellence, others only middling, but all of them have been more or less cramped by the pressure of harvest work. With so many threshing outfits running at hot haste everywhere, it is impossible to attend properly to the details of an exhibition. In a few cases, let us hope they are only few, little jealousies have kept some away, and but for the hearty zeal of public-spirited directors there would not always be the good results we are pleased to record.

Lumpy Jaw.

Dr. Patterson, chairman of the Provincial Board of Health, has addressed the Minister of Agriculture as follows:—

"Dear Sir,—A short time ago my attention was called to the fact that cattle suffering from Actinomycosis, commonly known as 'lumpy jaw,' were frequently imported into this city, and sold to certain dealers, slaughtered, and the carcasses sold to city butchers for food supply. Investigation shows this to be true, and that from 100 to 150 of such diseased animals have been thus disposed of in this city this season. Actinomycosis is an infectious disease, due to the presence of a peculiar fungus, termed ray-fungus, and the disease is characterized by the development of tumor-like masses at the point of infection; these undergo softening and suppuration, the disease extending to all adjacent tissues. The medium of infection is believed to be some article of food. The recognition of the disease as a specific one is of comparatively recent date. It was formerly confounded with sarcoma, one form of cancer. It is found only in herbivorous and omnivorous animals, including man. In cattle the disease occurs most frequently in the lower, hence the common name of 'lumpy-jaw.' In man likewise the lower jaw is most frequently affected. Of 73 cases in man reported by one observer, in 41 the jaws, mouth, throat, tongue and oesophagus were involved; in 14 the respiratory tract; in 11 the intestines, and in the remaining 7 the point of infection was not ascertained. In man a very considerable number of cases have been met with during the last few years, and it is presumable that a considerable number of cases of so-called sarcoma of the jaws would prove to be Actinomycosis under careful microscopical examination. The course of the disease is indefinite extension and ultimate death. The only treatment of avail is early and complete removal of all tissues affected. Under the circumstances I believe the traffic in and use of diseased animals for food should be prohibited."

Acting on his suggestion the Minister of Agriculture has decided to add this disease to the list of infectious or contagious diseases, authority for which is given by section 2, sub-section 'h' of an act respecting diseases of animals. The order-in-council will be made at once, and section 52 of the act gives the same force to such order as the act already in existence.

It would be well for all persons interested, owners of such diseased stock, and carriers of stock to note well sections 24, 25 and 26 of said act, which relate to the penalties for offering for sale, disposing of and carrying such animals to market.

Prairie Fires.

A week ago the Western Prairie said: "Every season there is much destruction of property caused by the burning of straw. For some weeks there has been but little wind, but as soon as a gale sweeps the prairie those charred straw piles will be heard from." This forecast has had a prompt and sad fulfilment. There is little room to doubt that the fires which have resulted in such loss of human life, stock and crops have most of them been started from straw piles whose embers were fanned by the gale till they started on their work of destruction. For all this there is not equal blame on the part of the originators, and to most of the worst sufferers no blame whatever attaches. The want of cultivation in the districts devastated, and the excessive dryness of the fall, combined to lay the train, and the carelessness begotten of haste is the reason why fires are so frequent everywhere. The French settlers along the west side of the Red river have suffered terribly, for besides the loss of feed for their stock, the sale of hay on the Winnipeg market was the principal means of their livelihood. For all of these sufferers we express our sincere sympathy. This is one of the calamities on

which it is most appropriate that both Local and Dominion governments would do well to give a helping hand, in addition to whatever can be done by individual effort to relieve.

Bees.

Thos. Henderson, of Rabbit Hill, had 31 hives of bees last spring. From these 31 hives and the swarms which have been produced by them he has taken 4,700 pounds of extracted honey this season, and has sold it at 20c. per pound. This would be a very handsome profit on the annual operations of an ordinary farm.

Messrs. Caldwell and Pinder, of Qu'Appelle Station, introduced a small hive of bees last June, and last week took from the hive twenty pounds of honey, leaving about forty pounds in the hive for the bees. They are quite pleased with the result of their experiment.

Alex. Zess, Regina, will be out \$3,000 as the result of some sports throwing away a lighted cigar near his place when out shooting.

Seven car loads of cattle were shipped on Monday to Kansas City, via the N. P., by J. R. Blair. They were bought at points along the M. & N. W.

S. J. Jackson, M. P. P., Stonewall, had the misfortune this week to lose over half his crop. The stacks caught fire from the sparks of the threshing machine.

Two horses owned by a farmer at Melita are dead. They got into the wheat field and ate so much wheat that they died. High-priced wheat is apparently too rich for ordinary animals.

Threshing returns in the Eden settlement are proving more satisfactory than in most other places. The yields are from 15 to 30 bushels per acre, H. Honeyman having the highest figure.

D. E. McDonald has just finished threshing about 1,900 bushels of wheat. Old land yielded 24 bushels to the acre and new land 32. The wheat is an excellent sample and graded No. 1 hard.—Dauphin Press.

At Spruce Creek, N.W.T., the mice are so bad this year that they have destroyed about ten per cent. of the wheat in the stook. It is a common thing to see from twelve to twenty large mice under one stook, and sometimes twice that number.

Squire Sowden, of Souris, who for some time had been paying a higher price than the market would warrant or than any of the other grain buyers on Souris market could pay, has gone out of the grain business, and Souris farmers are weeping. Perhaps the Squire is weeping, too.

Ten tons of the best Canadian wheat are being shipped to Russia for seed purposes. The Russian Commissioner of Agriculture was taken with Manitoba hard, and will make this a test for improving the quality grown in this country. The order will be filled from wheat grown on the Brandon and Indian Head farms.

Two wags out Birtle way asked the doctor to prescribe a bottle of whiskey with something in it as a medicine for the sick wife of one of them. He did so, and the medicine, or rather the share of it they took on the way home had such an effect that they are likely to remember that joke for a good few months to come.

Smith Brothers, Eden, in 1895 reaped 10,000 bushels, which brought from 38 to 42 cents per bushel, or an average of 40 cents; in 1896 the same ground gave 7,000 bushels, which averaged 60 cents; this year the return is only 5,000, but at 80 cents they will pocket more money than in any of the past three years, as the expenses of handling are so much less.

There are at present four colonies of Ruthenians, or, as they are more commonly, though erroneously called, Galicians, settled in Canada. One in Lake Dauphin district numbering 300 families; one in Yorkton with 200 families; one at Stuartburn, near Dominion City, number-

ing 250 families, and one at Beaver Creek composed of 200 families.

The accidents resulting from careless, ignorant and foolish handling of guns are at present too numerous to give in detail. One of the worst took place at Summerberry, N. W. T., when a son of Frank Jordan was killed and another badly hurt by a German boy handling a loaded gun. Riding in a buggy after game has also been fatal in one or two cases.

At Clear Springs, Man., Allan McCaskill was recently working in the fields when two city sports fired their guns near the horses. The team at once ran away with the disc harrow. The boy fell in front of it and the harrow passed over him. Strange to say, he was only slightly bruised. The tongue of the harrow was broken and the tools scattered over the field.

The Department of Agriculture is sending to Calgary samples of butter packages made of tin, with the object of encouraging their manufacture and the packing of butter in this way for export to China and Japan. Along with the tins is a machine constructed specially for the purpose of closing the packages after the butter is placed in them. Prof. Robertson bought the machine and sample tins in Paris on his recent visit there.

An enquirer recently asked about a remedy for the fleas so abundant, especially on sandy spots, and troublesome in dwellings. An ingenious victim of their attentions has hit on the following cure. He had tried many ways of exterminating them, and at last hit upon the plan of putting fly paper with a chunk of fresh beef in the centre, under the bed. In their attempts to get at the beef they get stuck on the fly paper, and in this way quite a large number were caught.

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NORTHERN PACIFIC RAILWAY TIME TABLE.

MAIN LINE.							
Arr.	Lv.	Arr.	Lv.	Arr.	Lv.	Arr.	Lv.
11 00a	1 30p	Winnipeg	1 05p	9 30p			
7 55	12 01a	Morris	2 32	12 01			
5 15	11 09	Emerson	3 23	2 45			
4 15	10 55	Pembina	3 37	4 15			
10 20p	7 30	Grand Forks	7 05	7 05a			
1 15	4 05	Winnipeg Junc.	10 45	10 30p			
	7 30	Duluth	8 00a				
	8 30	Minneapolis	6 40				
	8 00	St. Paul	7 15				
	10 30	Chicago	9 35				

MORRIS-BRANDON BRANCH.							
Arr.	Lv.	Arr.	Lv.	Arr.	Lv.	Arr.	Lv.
11 00a	1 25p	Winnipeg	1 05p	9 30p			
8 30p	11 50a	Morris	2 35	8 30a			
5 15	10 22	Miami	4 06	5 15			
12 10a	8 26	Baldur	6 20	12 10p			
9 28	7 25	Wawanesa	7 23	9 28			
7 00	6 30	Brandon	8 20	7 00			

PORTAGE LA PRAIRIE BRANCH.							
Lv.	Arr.	Lv.	Arr.	Lv.	Arr.	Lv.	Arr.
4.45 p.m.	Winnipeg	12.35 p.m.					
7.30 p.m.	Portage la Prairie	9.30 a.m.					

C. S. FEE, Gen. Pass. Agt., St. Paul. H. SWINFORD, Gen. Agt., Winnipeg.

New Elevators.

The following is a list of the elevators built by the Bready, Love & Tryon Co. this year: Carberry, Oak Lake, Grenfell, Sinaluta, Lumsden, Moose Jaw, Oak River, Beresford, Glenewen, Plum Coulee, Winkler, Clearwater, Boharm, and Caron.

The Manitoba Grain Co. Ltd. has this year put up 13 new elevators of 25,000 bushels capacity. On C. P. R.—Pierston, Gainsboro, Souris, Brown's Siding, Hargrave, Sidney, Forrest, and Burnside. On N. P. R.—Rounthwaite, Ashdown, Hilton, Roland, and Letellier.

The Dominion Elevator Co. has this year built as follows:—Miami, 25,000 bushels; Rosebank, 25,000 bushels; Whitewood, 30,000 bushels; Wapella, 30,000 bushels; Wolseley, 25,000 bushels; and will rebuild those destroyed by fire, two in number, Emerson, 30,000 bushels, and Bagot, 25,000 bushels.

The Northern Elevator Co. has this year purchased three elevators—at Winkler, Morden and Alexander—and built 15 new ones, averaging 25,000 bushels capacity. They are spread over the country as follows:—Altona, Baldur, Balgonie, Cartwright, Carberry, Carroll, Carman, Dauphin, Findlay, Griswold, Indian Head, McLean, Myrtle, Otterburn, and Rathwell.

Gainsboro—Oct. 12th.
Innisfail—Oct. 7th.
Kamloops, B. C.—Oct. 13th, 14th and 15th.
Killarney—Oct. 11th and 12th.
Melita—Oct. 13th and 14th.
Minnedosa—Oct. 7th.
Morris—Oct. 7th and 8th.
Moose Jaw—Oct. 6th.
New Westminster, B.C.—Oct. 6th, 7th and 8th.
Neepawa—Oct. 12th and 13th.
Oak Lake—Oct. 19th.
Oak River—Oct. 13th.
Pilot Mound—Oct. 5th and 6th.
Souris—Oct. 13th and 14th.
Strathclair—Oct. 8th.
Shoal Lake—Oct. 13th.
Stonewall—Oct. 7th.
Springfield—Oct. 6th and 7th.
Wapella—Oct. 7th.
Whitewood—Oct. 12th.
Wolseley—Oct. 15th.

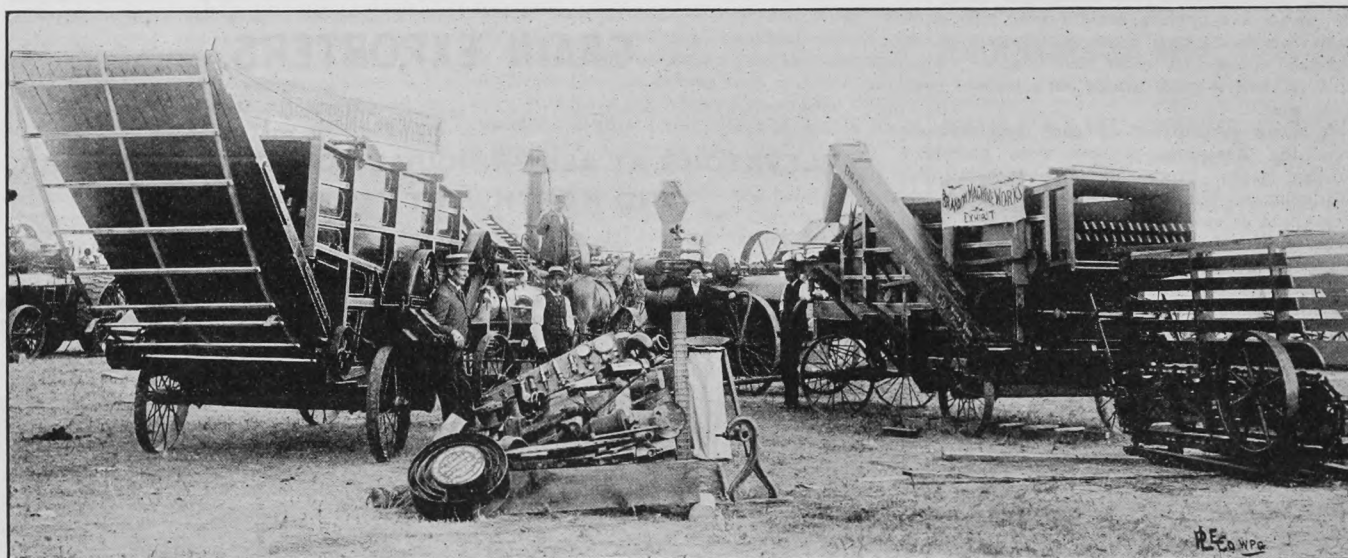
Rothbury and Logberg held its third show on Sept. 28th. There was a capital show of both pure and graded stock, and a good display of smaller stuff.

Fish Creek, Assa., held its show on Sept. 18. Exhibits rather fewer than last year. Mr. Shat-

the second day was not up to the mark. Some very good things, others not at all a credit to the district. Pigs made the best show. The heavy draft team of Mr. Lawson, Thornhill, was away up in quality. Owing to no provision having been made for fixing the names to the exhibits, we are sorry we cannot give a fuller notice of the many good things on exhibition. Messrs. Sweet, Lawrence, Snowdon, Laycock, Bowie and Pirt were prize-winners. The attendance was large, but the races appeared to be the principal attraction for the majority.

A Progressive Concern.

The Brandon Machine Works Co. was established in the year 1883. Like all large concerns, they had a small beginning, but it can truly be said of them now that they are one of the great enterprises of the Northwest. The business has outgrown repairing only, as they now manufacture thresher separators, roller crushers, saw machines, and do all kinds of elevator work. In short, anything that a person may desire in repair work or a manufactured article, this enterprising firm are prepared to contract for. The several departments of their work, boiler work, blacksmithing and machine and carpen-



Brandon Machine Works Exhibit at Brandon Fair, 1897.

The Lake of the Woods Milling Co. has this year put up the following new elevators:—Lauder, Whitewater, Elva, Forrest, Bagot, McGregor and Qu'Appelle, having a capacity of 30,000 bushels each. Their previous capacity was as follows:—Keewatin, 600,000 bushels capacity; Portage la Prairie, 175,000 bush; Boissevain and Neepawa, 50,000 bush. each; Altona, Winkler, Morden, Manitou, Ninga, Arden, Franklin, Treesbank, Carroll, Reston, Fleming, Moosomin, Melita, Elkhorn, 45,000 bush. each; Hartney, Souris, Methven, Carberry, Douglas, Griswold, Virden, Macdonald, 35,000 bush. each; Winnipeg, 20,000 bush; Indian Head and Dominion City, 30,000 bush. each; Gretna, Plum Coulee, Thornhill, Carman, Holland, 25,000 bush. each; Deleau, 10,000 bush.; Rosenfeld and Newdale, 15,000 bush. each.

Fall Fairs.

Agricultural exhibitions will be held in Western Canada as follows:—

Ashcroft, B. C.—Oct. 12th and 13th.
Boissevain—Oct. 14th.
Carman—Oct. 7th and 8th.
Cartwright—Oct. 7th and 8th.
Deloraine—Oct. 7th and 8th.
Elkhorn—Oct. 7th.
Emerson—Oct. 14th and 15th.
Fort Saskatchewan—Oct. 12th and 13th.

tuck showed a very fine Shorthorn bull, and the inside show was good.

Birtle fair was held on Sept. 30. Live stock showed improved breeding, especially in horses, cattle and sheep. Vegetables good. Ladies' work and fine arts very superior. Premier Greenway was present at a banquet in the evening, when 150 were present.

Hartney, on Sept. 29 and 30, had a very large attendance. Horses were a special feature. Other stock not numerous, but some good ones. Wheat and dairy produce very fine. Ladies' work and other domestic manufactures very much admired. The entries were near 1,000, and this caused the exhibits to be scattered over too many places, which helped to mar an otherwise good show.

Morden fair was held on Oct. 1 and preceding day. The inside show was a capital one. In wheat, 25 bush. and 10 bush., 1st place was taken by Chas. Paterson, Thornhill, for a very good sample from that fine district. The vegetables were a very large and excellent display. Butter and baking excellent. The exhibit of A. P. Stevenson, Nelson, was very fine in varieties of apples, crabapples, grapes and elderberries. The woolen mills had a most creditable exhibit of their manufactures. Upstairs was a very fine show of ladies' work, the design and execution all that could be wished. The out-door display

ter work are superintended by the best foremen available, and the whole concern, under the management of Jas. Sherriff, who has had 25 years' experience, is a guarantee for first-class work. One specialty is the re-building of separators. Such a complete job of these is made that it takes an expert to detect them from new ones. Another special article is the McRobie chemical engine for fire protection in towns and villages, also stationary boilers for isolated buildings. These fire fighters have been endorsed by the Local Board of Underwriters and valuable testimonials received from Virden, Neepawa, Holland, Rat Portage and Boissevain. As every town in Manitoba and the Northwest should have fire protection, water being scarce, it would be wisdom to make enquiry as to prices and terms. The Manitoba Government have placed upon the statutes a law authorizing unincorporated towns and villages to provide themselves with fire protection. (See R. S. M., Vol. 2, Cap. 100, Secs. 454 to 460.) The Winnipeg School Board, realizing the fire protection from the stationery boiler, have ordered one for the Aberdeen school, and it is now being placed in position. It is expected before many months they will order four more for their isolated schools. One of the chief characteristics of this firm is promptness. With first-class mechanics, they are prepared to do any kind of work in wood and iron in any part of the Northwest on short notice.

Fatal Prairie Fires.

The fires of Saturday, Oct. 2, were, by general consent, the worst ever seen in this province. The grass was a heavy crop and dried by sun and warm winds for ten weeks. The gale that had been blowing from the south for days developed at mid-day on Saturday into something like a hurricane, and wherever fire started it rushed on at a fearful rate of speed. The smoke was suffocating, and strong men on the C. P. R. were almost choked by it. We give below the bulk of the latest particulars that have reached the city at the time we go to press.

Clearwater, Oct. 3.—A terrific high wind from the southwest prevailed here yesterday. It brought prairie fires from the United States side of the boundary, which swept over the most of townships 1, 2 and 3, in ranges 12, 13 and 14. Joseph Lawrence lost 200 tons of hay, all his oats in stack, his stable, granary, and all his implements. James Croskery lost his dwelling and contents. George Little lost two stacks of oats and several farmers lost hay in stack. While saving his granary, Thos. Coughlin, Jr., was severely burned about the face and arms, his clothing catching fire. Under Dr. Riddell's care he is now improving. Clearwater was threatened, the inhabitants being on the watch and fighting fire till near midnight. Some had moved their goods and chattels on to summer fallow and other safe places. The C. P. R. had a small bridge burned about two miles west.

At Morris the fire had evidently been started from the Mennonite villages west, probably burning stacks. From this onward to within two miles of Winnipeg, the country is, with very slight exceptions, a blackened waste. The train crawled for miles over burning ties. At Shanawan, 24 miles out, two cars were burned and four escaped. At one or two points the fire was still blazing close to the track in the scrub. At St. Agathe there was evidently a terrific fire burning along the river, to which the fire had then reached. The whole river tract from this almost to Winnipeg was burning. There was a mile or two here and there that had escaped. The Boyne marsh, still further west than the Mennonite villages, seemed also on fire, and at many points on the west side of the track, but several miles away fires were blazing more or less fiercely. A very heavy crop of hay has been gathered along this line this summer, of which scarcely a remnant has escaped. Practically the country for a dozen miles wide, from Fort Rouge to within a few miles of Morris, is a blackened waste, and the French settlers especially must have suffered a nearly total loss. In the country about Silver Plains and along the river there was a great deal of wheat raised, and it seems scarcely possible that it can have escaped. A considerable portion of the fences along the line was burned and enough telegraph poles to stop transmission of messages. Reports were in circulation at Morris that a Mennonite family, consisting of husband, wife and child, living in the western village on the northern bank of Morris river, were burned to death on Saturday. This has happily proved incorrect. The people of the town were greatly alarmed, and all were out during the afternoon endeavoring to put out the flames, and prevent the fire approaching the buildings. A son of L. Kastner, who had driven a party of fire-fighters out some distance, was knocked down by the horses and injured. Considerable grain and hay, also several farm implements, were consumed by the flames.

A little after noon the fire reached the Northern Pacific track between Cartier and St. Norbert, and did considerable damage. Between 700 and 800 ties, 15 telegraph poles, and about a mile of fencing were consumed by the flames. The train going south on Saturday got through all right, but the north bound train was held for two hours at St. Agathe, while the burned ties were replaced and the road made safe.

Ten miles north of Beausejour is a new set-

tlement of Germans. Two women and five children were surrounded by the flames. Their husbands were away from home working at the harvest and escape for these unfortunates was impossible, nothing but a few charred parts of their bodies being left. The following families lost everything, and are destitute: Thomas Dimlach, T. T. Myssekowski, A. Stryer, John Pfifer, E. Jones, W. Wickens, D. Brown, W. Saunders, J. Huggins, D. Rockseder, E. Huffman and three other German families, names not known, and the following families lost everything but their homes:—W. Buchanan, A. Beattie, J. Garland, R. McPherson, John Bush. S. Turner lost 200 tons of hay, and J. D. Campbell, 200 tons of hay and hay press. John Sinnett, 1,200 cords of wood. Mrs. O. W. Thomas, her son and daughter, were returning from the Beausejour exhibition, and were overtaken by the fire, and were only saved by being rolled down an embankment into some water, but were severely burned, their horses being burned to death. Besides these dead, there are very many narrow escapes reported, one woman

named Wyrzkowski having only time to snatch up her three little children and escape from their burning home, not even having time enough to get the children's hats. Cattle, sheep and horses are being discovered dead and dying in all directions, conservative estimates placing the number of killed at not less than 100. The wind was blowing a hurricane at the time of the fire, and seemed to start fresh fires in every direction, making any attempt at fighting it useless. Mr. Sinnett, who has just completed building a new house, lost it and his entire farm buildings and machinery.

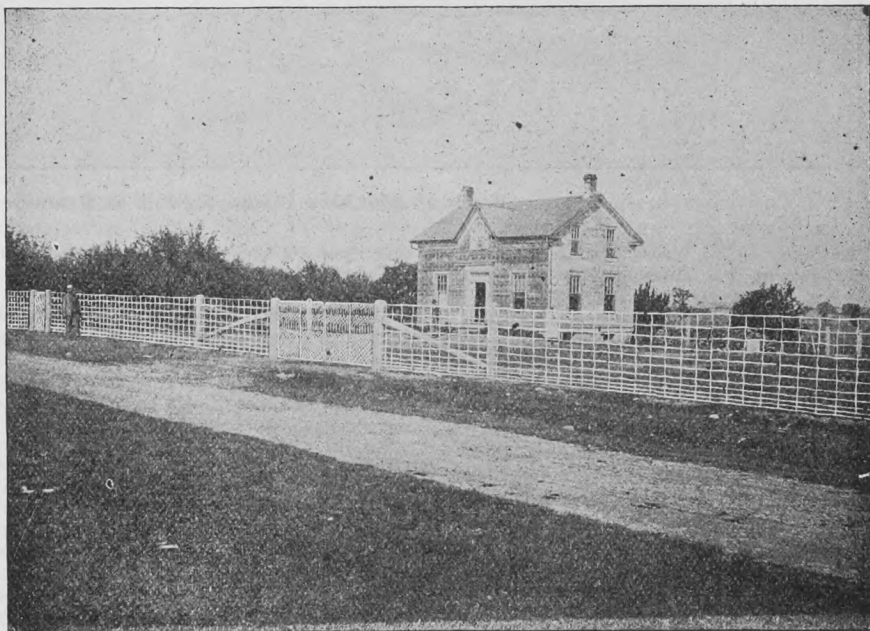
East of Beausejour for a long distance the woods were on fire, and the charred remains of a man were found near Whitemouth. East of Whitemouth affairs were very dangerous. The section foreman of Darwin and his wife and men were picked up by Conductor Campbell and brought into Whitemouth. Roadmaster Horner, on a handcar, attempted to run from Darwin with men, but nearly succumbed through suffocation, and was compelled to take refuge in a passing freight. He said the experience was

Northern Elevator Co., Limited.

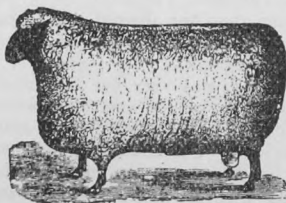
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A DOLLAR CAN WILL DO FIFTY SHEEP.

FLEMING'S DRUG STORE, BRANDON, MAN.

terrible. All the telegraph poles for several miles east of the town were down, and trains were tied up till noon Sunday. An old woman named Laundry was burnt, and a German woman has also, it is believed, fallen a victim. She took some of her children for safety to a neighbor's house, and returned to try and save the rest. She has not been seen since, and the house is a mass of ashes. Mr. Jorgenson, up the river, lost a new house and stable, and several settlers had close calls for their lives. J. P. Johnson got 30 tons of hay destroyed, and will be compelled to sell most of his stock. The wind reached a hurricane height about 4 o'clock in the afternoon, and a darkness fell upon the country as dense as at midnight. The scene was the wildest and weirdest on record.

On the Portage branch of the Northern Pacific fire destroyed many ties and a small bridge, which could not be replaced till next day, when the train ran through.

St. Charles and Headingly suffered extensively. Several farmers lost a large amount of grain. Mr. La Fleche, St. Charles, had a granary burned, in which was stored 1,000 bushels of wheat, 2,000 oats and 500 barley. He also had a binder, wagon, three miles of fence and a number of farm implements totally consumed by the fire. His loss will be in the neighborhood of \$3,000. Mr. Wright lost 175 tons of hay, O. White, 60 tons, and Messrs. Rickerts, Bruce, Smith and many others also lost hay in large quantities. Many cattle and horses suffered an awful death, and their carcasses now lie on the blackened prairie. Despite the seeming impossibility of saving anything from the fire, a number of farm houses were saved by the almost superhuman efforts of the people, who fought the flames with untiring and unceasing energy, all through the long day and well into the night. A half-breed's house just south of St. Charles and a small house owned by O. Smith were destroyed.

At Stony Mountain the C. P. R. station and coal sheds were in great danger for a while, burning cinders setting fire to the platform half a dozen times. Twice the flames were discovered blazing up from underneath, and the platform had to be torn up in many places. It was only by the exertions of the force from the penitentiary that this place was saved. Sixteen farmers in the Stonewall district are heavy losers. Three hundred tons of hay were lost by the fire that ran north from Rosser. Among the sufferers were J. Simpson, J. Sims, E. Good, A. G. McKenzie, J. Hall, L. Frayne, R. Porter. It was only by the most strenuous efforts that A. Matheson and others saved their houses.

Near Ossowo, Messrs. Mitt, Sissons, Greave and Muigan lost everything, barely escaping with their lives. From Lake Frances reports come in that fourteen out of seventeen settlers have lost everything, and fears are entertained for the lives of some. Bad reports are also coming in from St. Laurent. Around Reaburn several hay stacks have been burnt. Cattle have been burnt by the dozen out north.

West of Marquette, F. F. Hyde lost his granary and nearly all his grain stacks.

From Lake Frances, Edward Martin and William Allen were badly burnt, and later advices are sure to add to the list of heavy losses of hay and cattle.

The town of Bagot is pretty nearly wiped out. Large quantities of cordwood were piled on the south side of the track, and when this took hold, it became impossible to endure the heat, and only by the earth that was thrown out of a recent excavation was the Lake of the Woods elevator fireguarded enough to escape. It is also sheeted with iron. McMillan's elevator with 20,000 bushels of wheat, seven box cars, Lowrie's general store, dwelling house, cold storage and stable, Walden's house and blacksmith's shop, Link's stable and twenty tons of hay, Buchanan's stable and 1,500 cords of wood were destroyed in the village alone besides much property in the surrounding country, of which reports are not yet to hand. The section

house is the only house in Bagot not burned.

East of Selkirk 1,300 cords of wood were destroyed. The fire swept from Parkdale to Selkirk, destroying hay and crops along the route, also Massey's house at Lower Fort Garry.

At St. Francois Xavier the fire jumped the Assiniboine river, burning the farm buildings and house of B. Paradis, with all his stock, wood and hay, 300 tons of Grieves' hay, all of H. St. Germain's grain stacks, S. Yaste's out-buildings and hay, W. P. Pearson's hay, F. Longbottom's hay. Bridges and culverts along the main road and pastures for the balance of the season are also gone.

At Reaburn great loss of hay took place, and there is little doubt that Hamilton Upjohn, one of two brothers, a few miles north, was burnt while trying to save his cattle.

Bonnie Doon, south of Lake Frances, reports only four houses saved. The following are the sufferers and their losses:—W. Allan, stables, 125 tons of hay, wagon and team of horses. Hetherington, stables, hay, house, and pile of lumber. Hoard, 70 tons of hay, stables and two pigs. Linly, 60 tons of hay, stables, bull, a colt, and five pigs. Price, 58 tons of hay and stables. Livingstone, 30 tons of hay and stables. H. Upjohn, house, stables and hay. S. Upjohn, house, Martin and Carpe, house, stables and 60 tons of hay. J. Martin, hay and stables. R. Kerr, H. Bates and C. Mills, hay and stables. Miss Wilson, 20 tons of hay. Mr. Allan, who was returning home from Stonewall with a load of lumber, was caught by the fire, and being unable to free his horses, they and the wagon were burned. Allan himself was badly burned, especially about the feet, but managed to reach a neighbor's, where he now lies.

At Pomeroy, at the house of Mr. Martin, his wife was lying ill in bed. The building caught fire, and Mrs. Martin was carried out on a mattress. Fears are entertained for her recovery.

John W. Parker, Blythfield, reports very heavy losses in that district. No lives were lost, but the loss of property will be very heavy. Farmers are left with horses and stock, but no hay, straw or grain to carry them over the winter, and in many cases no buildings. The country has been burned through from Starbuck to LaSalle and on to the river. Among those who have lost more or less heavily are John A. McCrae, hay, horses and grain; C. C. McCall, all his hay and grain; Messrs. Warren, Lee, Burns, Mellows, Ross and Fraser are also heavy losers. About Blythfield John Moore loses half his grain and all his hay, Mr. Alexander suffers the same. Two families of Rogers lose hay and grain. Commeau, of LaSalle, loses 18 stacks of grain. Mr. Parker himself loses 100 tons of hay. Among other losers that he could give from memory were Messrs. Nugent, Scott, Johnston, John Cuddy, Adam Kinghorn, Buckingham, McLean, Russell, Casselman, Chapman, Chatfield, West, Goodrich, Patterson, Potts, Wheatland and Wilson. The fire seemed to come from the direction of the C. P. R. southwestern line and was blown along at a terrific rate by the hurricane. The fire jumped 150 yards at a time, and stacks were often blazing before the fire in the grass had reached within fifty yards of the fire guard. While fighting the fire the smoke was so dense that he could not see the horses heads from the wagon.

Another fire started south of Gladstone, and travelled northeasterly through the Lakeland country toward Lake Manitoba. The fire jumped all obstacles, including the best burned firebreaks, railway tracks, and even the White Mud river. Among those losing heavily were Thomas Cory, Jr., three miles south of Gladstone, who lost 200 tons of hay. It was reported that some houses and buildings had also been burned.

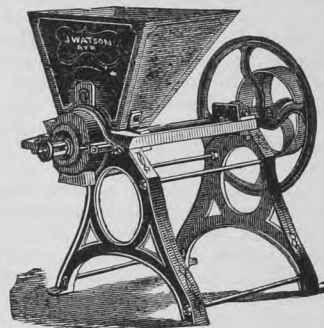
On Wednesday, Sept. 29, a fire started about three miles west of Bergen, and it travelled right through to Stony Mountain. William O'Neill lost five stacks of wheat and about 60 tons of hay. Bert Grisdale, son of the Bishop of Qu'Appelle, lost about 30 tons, and C. Smith

about 30 tons. Wm. Biggar lost a large stack in the farm yard, and only by the most superhuman efforts did he save the buildings.

General Manager White, of the C. P. R., informs us that his road will carry food, supplies and clothing to the sufferers in the late fire free of charge.

It is estimated that about one-third of the wheat crop of 1897 has already been marketed. In previous years deliveries have scarcely commenced at this period of the season.

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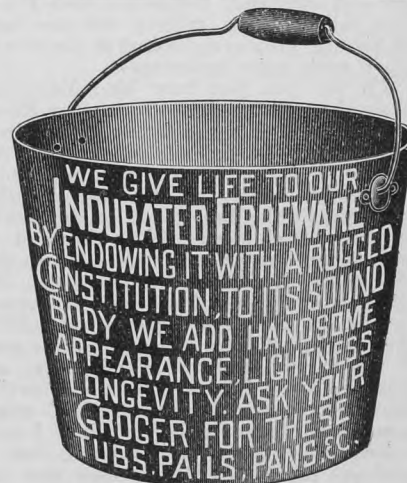
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An Abandoned Farm Reclaimed.

Pine top was a small, straggling village in the midst of what had once been a prosperous farming country. It consisted of two or three dozen houses, a shingle mill, which only ran half time, and the usual country variety store.

One day, Andrew Coon, the Pine Top storekeeper, was aroused from his afternoon nap upon the counter by a light touch.

"What's wanted?" he asked drowsily; then, as he came to an upright position on the counter and saw the pale, shabbily dressed boy who had disturbed him, his face darkened angrily. Of course it was one of the mill hands from the valley. Thieves and robbers every one of them.

"What d'ye want?" he demanded, as he slid heavily to the floor. "How come you 'way up here?"

The boy looked a little surprised, but unstrapped a rude, home-made knapsack from his shoulders and let it fall to the floor; then he answered nonchalantly:

"Want to fire some questions at ye 'bout things in general, an' my legs brought me here. Oh, you needn't get mad," as Coon moved toward him threateningly; "you shouldn't speak to strangers like they was goin' to swipe something if you don't want 'em to answer back. But I s'pose you're arter my business. Well, I'm a capitalist, an' I'm hurtin' round for a summer home. Know of any in the market?" He looked about the store for a stool, but not seeing any, raised himself to the counter, which Coon had just vacated. "Seems like I never was quite so tired. They told me down t' the fact'ry 'twas 'bout twenty miles; but if any one asks me after this, I'll say it's jest forty, an' good measure, 'specially if one lugs a knapsack. You've got a pretty fair store here, mister."

Coon had been gazing at him with the cloud slowly leaving his face. There was something about the bright, unconcerned stranger that appealed to his good nature. He was independent himself to the verge of obstinacy, and he liked to see the same trait in others, and surely this boy had his share. He was already growing curious as to what had brought him there, and after a moment's hesitation, he drew out an empty raisin box, and seating himself upon it, elevated his feet to the counter beside the boy.

"You're one o' the mill hands down to the fact'ry, I s'pose," he said interrogatively.

"Me? No; I'm straight from New York. A capitalist, I b'lieve I told you." Then suddenly the raillery left his face and his big, grey eyes looked at the storekeeper with quiet seriousness.

"I'll tell you jest how 'tis. You see, I'm in the peddlin' business on the Bowery, an' I've got a big family o' children on my shoulders—five of 'em,—an' the responsibility is gettin' to be consider'ble. They're growin' up all the time, an' the Bowery ain't the best place in the world for growin' children. I've knowed it right along, but was stumped what to do. I'd always lived on the Bowery, an' hadn't scursely heard o' such a fur-off place as the country. But last year, Billy—he's eight, an' sort o' spindly—was sent off for a week by the Fresh Airs, an' when he come back, he was just ravin' 'bout set the other children wild. I sort o' listened without sayin' much, but it fixed my mind that the country was the place to grow a fambly in."

"How old are you?" asked Coon, abruptly.

"Cordin' to years, 'bout sixteen, I s'pose; 'cordin' to everything else, 'bout sixty." He pulled a lock of his long, straggling hair round so that he could examine it critically. "'Tain't gray," he

said, with an air of disappointment; "but I s'pose that's n acc'unt o' my not bein' respectable. Gray hairs are respectable, you know. Well, as I was sayin', the children's craziness set me 'bout raisin' the fambly in the country. But I was stumped how to start out. I'd never been away from the Bowery myself, an' I didn't have a dollar ahead. You see, I wanted the fambly to grow up sort o' dif'runt from the folks round us, so I'd kept 'em to school an' preached to 'em like a regular gospeler, an' if I do say it," a flush of pride coming into his sallow face, "my kids are 'bout as tidy a lot as you'll find anywhere."

"How old are they?"

"Six to fourteen—two-year steps 'tween 'em, reg'lar. Ben's fourteen and Phil's twelve, an' both o' 'em know sights more'n me. I've kept 'em to school pretty stiddy, an' ain't had no time to go myself yet. Well, arter Billy got back, an' I had the country business fixed in my mind, I turned the peddlin' over to them two lads an' got a job on the river where I could make more. Sence then they've kept the fambly goin', an' I've saved my wages. Last week brought me up to a hundred dollars. That's what we fixed on to start with, so I lit out."

"But how did you happen to come here?"

"Billy's week was spent with one o' the fambly down in the holler. I went there first, but it was too close to the fact'ry. Seemed to me if a feller was arter country, he might as well go right into the middle o' it an' get all he could. So I strapped on my bundle an' pegged up here." He raised his shoulders with a gesture of weariness, and added, "An' it's forty miles, good measure, like I said afore."

Coon's face had been a study during the boy's narrative. Surprise, incredulity, approval, and pity had been written there in turn, and he now let his feet fall from the counter and rose slowly from the raisin box. Thrusting his long arm into a barrel near him he drew out a handful of crackers, which he laid on the counter beside the boy; then he went into a back room and presently returned with a large slice of cheese, which he placed upon the crackers.

"There, put that inside your jacket an' see if you don't feel better," he said gruffly. "It's forty miles when one's afoot, good measure, like you say. I know, for I've tried it, an' my legs are longer'n yours. But come, why don't you eat? Ain't you hungry?"

"Yes; but I ain't asking for no vittles. I've got money in my pocket, an' I've got a week's grub in my bundle. I bought a job lot o' pieces from a bakery jest 'fore I started. But I'm much obliged, all the same."

"Oh, come, come! Folks up this way ain't offish. When we're asked to eat, we eat, an' when people call on us, we always ask them to eat. You're my comp'ny now."

The boy looked at him searchingly, then picked up the crackers and cheese.

"If you put it that way," he said socially, "I'll take 'em, an' thank you. But when we get settled, you must be sure an' call on us an' let Polly get you up one o' her dinners. Polly's great on cookin', if she ain't but ten."

Coon watched him silently as he munched away at the crackers and cheese. The boy was small for his age, and his clothes were very much patched and altogether too large. The sleeves of his jacket were cut off at the wrists, and his trousers rolled up liberally at the bottom to prevent stepping on them. But when he looked up, his gaze was keen and straightforward, and his eyes looked directly at one without any signs of wavering. Coon liked such eyes.

"What do you propose doing?" he asked, as the last cracker disappeared.

"Hire a place an' grow things. That's what folks do in the country, ain't it?" Then, seeing the look of derision on the storekeeper's face, he added: "Of course we don't know nothin' 'bout farmin', but can learn. All the children are quick to pick up things, an' there ain't a lazy bone in none o' 'em. I come in here mostly to ask if you knew o' a good place."

"Oh, there's plenty o' places to rent, an' pretty nigh to give away; but you couldn't make a livin' on any o' 'em. Why, boy, reg'lar farmers left 'em for fear o' starvin'; an' do you s'pose a passel o' street children could make a livin' where they failed?"

"I wouldn't be s'prised," answered the boy, composedly. "Street children ain't no ways partic'lar, an' often pick up a good livin' from ash barrels and 'round groceries. I lived that way for weeks in an' out 'fore I was big enough to work. My whole fambly can get along on a dollar a week by eatin' rice an' bakers' job lots, and I wouldn't wonder if some o' your poor farmers wasted more'n enough to keep us goin'. I talked with some comin' up, an' found that lots o' 'em didn't even pick up their apples. Shucks! My fambly wouldn't go hungry on a place that raised apples an' huckleberries an' walnuts, an' them sort of things."

"Well, I dunno," Coon said reflectively; "mebbe you're right. I know from experience that some folks can make money where others starve. There's plenty o' places round here, an' the owners would be glad to have somebody live on 'em an' look out for things. Tramps come round sometimes, an' they burn fences an' break windows an' make a place run down mighty fast. Now, I've got a house an' thirty acres a mile or so from here. Came to me by way of a mortgage, an' I ain't been able to do much with it yet. The fences are down, an' a good many windows broke in the house; but the ruff is tight, an' most o' the rooms are in pretty good shape. If you'd like to go out there, you can have the place an' welcome. I'll fix up the windows, and I'll furnish rails for the fences; you can build 'em as you get used to things. What d'ye say?"

"How much will the rent be?" asked the boy, cautiously.

"Nothin' for a while. It'll be money in my pocket to have somebody live there an' look arter the place. Last year I rented it to a fellow who used my fences for firewood, an' then went off without payin' me. He was too lazy to cut his own wood arter I offered it to him for the cuttin'."

The boy sprang lightly from the counter.

"We'll be awful glad to have it," he said eagerly; "an' we'll fix up the fences an' look out for things the very best we can. Are there any apples?"

"Lots o' 'em, an' peaches an' cherries an' grapes; an' jest back o' the house is plenty o' firewood, which you can have for the cuttin'. S'pose we go out an' look at the place. Trade is slack to-day, an' I can shet up as well's not. If you like it, we'll fix up some papers and you can begin right off. I'll let you have it two years in return for your livin' on it. Arter that we'll make some new arrangement."

He drew a huge key from his pocket and waited for the boy to pass out, then he followed and carefully locked the store door. Evidently he was much pleased with his prospective tenant, and perhaps his pleasure was augmented by the thought of new settlers for Pine Top. For a long time the tide had been toward the valley, and now these half-dozen children from the Bowery might almost be taken as an indication that it would turn and flow back. At least, Coon was willing to

think so. Had not this energetic young fellow passed directly through the valley and then chosen Pine Top in preference? If the other five were like him, they would be worth retaining, and the representative citizen of Pine Top determined to use his best efforts in that direction. What did it matter if they were only half grown? It was just such bright, energetic children that this section needed.

"Where's the rest o' your fambly?" he asked, as they walked along the street toward the stable where his horse was kept. "Did you leave 'em down to the fact'ry?"

"No; they're in the city. I jest come ahead to get things fixed. When I found a place, I was to send for 'em. Ben an' Phil can look arter the little ones all right. You see, I wanted to have a place all ready—some furniture an' grub, an' that sort o' thing. Jiminy-cricky! but won't the children have a gay time among all this green stuff! An' to think o' huckleberries an' nuts an'—an' such things growin' free!" He gave a low chuckle of wonder and satisfaction, and springing forward, turned four or five quick handspings, followed by as many cartwheels, circling round so that the last one brought him to his feet beside the astonished storekeeper.

It was nearly dark when Coon returned alone from his farm. He had tried to induce the boy to come back with him and stay all night, but to no purpose. The new tenant had found the place too attractive to leave. But the next morning, when Coon went to unlock his store, he found him on the steps; he wanted to buy some provisions and furniture, he said, and a few tools and various other things.

A week later the rest of the family arrived. Coon happened to be at the station after a load of merchandise and brought them back with him. As soon as the goods were unloaded, he took them over to the farm. Evidently the boy had not expected them so soon, for he was on his hands and knees washing the floor. Coon chuckled with hearty sympathy as he watched their meeting. When the boy wanted to pay him for bringing them up, he shook his head.

"It's jest a neighborly lift," he said; "you'll have to get used to that sort o' thing up here. Besides, I was haulin' goods, so 'twa'n't no trouble. An' about them papers. I'll fix 'em up jest as soon's I get a chance, an' you can sign 'em when you come over to the store. But you haven't told me your last name yet."

"Foster; I'm John Foster, an' the children—here, you rabble, come an' let me introduce you! There'll be time to scramble up the trees arterward."

Coon received the introductions with a broad grin on his face, and after he had shaken hands with all of them, and watched six-year-old Teddy hurry back to a low-branched tree, he climbed into his wagon and drove away with an expression of smiling satisfaction.

The house was an old-fashioned, low-ceilinged structure, with large rooms and many fireplaces. Now that the windows were repaired, it was, as Coon said, in pretty good shape. John had purchased a small quantity of cheap, second-hand furniture, that had been stowed away in Coon's barn, and this was arranged in several of the best rooms. The huge kitchen fireplace was furnished with cranes and hooks, and John had found several iron kettles and a skillet in the cellar. To these were added such other cooking utensils as Coon had told him would be necessary. In the closet was a good assortment of provisions and a few dishes. These, and the furniture, and half a dozen coarse blankets, had used up the hundred dollars.

For several weeks the children worked vigorously, putting things to rights in the house and about the place. John and Ben

occasionally made visits of observation to the neighboring farms and generally returned with new "points." It was too late to do any farming this year, even if they had known how, but they could be getting ready for another season. Gradually the old "home garden" of an acre or more was fenced in and cleared of stones and weeds; then they began to repair the fences around some of the larger fields. One day John returned from a visit to a neighbor with several hens that he said he was going to pay for in work. A week later he came home with the announcement that he had hired out for the fall and winter.

"We shall need some money to get along with," he said, as he drew his chair up to the fireplace and smiled at Polly, who was preparing the supper; "an' besides, there's lots an' lots o' things to learn 'bout farming. We'd have made a mess o' it if we'd tried to do anything this year. P'raps if we keep our eyes peeled, we'll strike in solid next spring. I'm to get eight dollars a month an' board, an' when I said I should come home nights, Mr. Carson offered to let me have the board's worth in vegetables. I'm to be there at four in the mornin' an' leave at eight in the evenin'; but it's only half a mile away, so 'twon't be very bad. I get my dinners there."

"But what'll the rest of us be doing?" asked Ben, rather disconsolately; "we ought to be earning something."

"You're to run the farm till next spring. Keep the fences goin' up so we'll have more ground; clean off the stones an' weeds an' get firewood for winter, an' 'fore long there'll be the apples an' pears an' grapes to look arter. No trouble but you'll have stacks o' work. An' I've been thinkin' we'd better get some more hens an' raise chickens an' eggs. I b'lieve there's money in 'em."

"What do with apples an' pears an' grapes?" asked Teddy, with precocious anxiety.

John took the little farmer on his lap. "I've been thinkin' we might send part o' 'em to our old friend, McPherson, who keeps the big fruit store on the Bowery. He's square, an' will do the right thing by us. I spoke to Mr. Coon 'bout it, an' he said he would carry 'em to the station for us cheaper'n we could carry 'em ourselves. He has to go down arter goods every few days, an' said 'twould give him freight both ways, an' that 'twouldn't be much work for his horses on account o' bein' down hill clean to the station. He said folks round here never did nothin' with their fruit 'cept make cider, an' that 'twould be a good thing if somebody could find a way to turn it into money."

Soon after John went to work, Coon came over and said he needed a boy to run errands and stay in the store when he was away, and offered to take either Ben or Phil. There was a short family consultation, and it was decided that Phil should go; Ben would be needed to look after the farm.

During the winter Polly and Billy went to school, and the older boys purchased books and studied evenings, as they could find opportunity. In the spring, John gave up his work and returned to the farm.

This year they worked very hard, but they were inexperienced, and much of their labor was thrown away. They planted potatoes in ground that was too wet and turnips in ground that was too rich and heavy, and the one decayed and the other grew bitter and unfit for table use. The cabbages did well, but for some reason their corn refused to form ears, and most of their beans blasted from injudicious hoeing in wet weather. When the crops were gathered in the fall, there was scarcely enough to last them through until another season.

But in other ways they were doing splendidly. Their little farm was beginning to look clean and well cared for, and from the sale of chickens and eggs, and the fruit sent to the Bowery merchant, they were enabled to buy an old horse and wagon; and there were new things in the house and new tools in the barn, and all of them, beginning with Teddy, were gradually emerging from the uncouth clothing and indescribable street air that they had brought with them. Neighbors who had been skeptical at first were losing their distrust, and would stop and shake hands with them and ask about the crops and poultry, and would speak of them to outsiders as the "smart Foster children." And then, one day, John went to Mr. Coon and asked him what he thought of starting a Sunday school.

"The children used to go reg'lar to one at the mission on the Bowery," he said, "an' they sort o' miss it out here. There's Mr. Carson got two boys workin' for him now, an' that new family over to the Corners with seven children, and Mr. Brown's hired man with one—why, we could get up a stavin' fine school!"

Mr. Coon smiled delightedly.

"I've been thinkin' about it myself," he declared approvingly. "We used to have a good Sunday school here, but folks kept goin' and goin' till we had to stop for want of scholars. But, as you say, I think there's children enough in the neighborhood now. I'll put up a notice, an' next Sunday we'll meet in the school-house an' see what we can do."

The second winter John worked out again at increased wages. This time he was able to save all his earnings. Phil was doing well at the store, and Ben had considerable work with the team. The two more than supported the family.

At the end of two years John went to the storekeeper. He was lounging on the steps, whittling.

"What'll you take for the farm?" John asked.

Coon looked at him curiously.

"Five hundred dollars, an' pay when you like," he answered. "I've been thinkin' 'twould come to this from the way you children have been workin'. Why, that Phil has been with me a year an' a half now an' I ain't had to speak a ha'sh word to him. I wouldn't be s'prised if he was layin' up consider'ble money."

"He an' I have saved two hundred dollars between us," John answered quietly. "We'll pay that on the farm now an' let you have the other three hundred soon's we can."

"Sho! that much? Well, come into the store an' we'll fix up the papers. I'll give you a bond for a deed an' let you have a clear title soon's you pay the other three hundred."

When John went home and showed the paper to the children, they all had to go out and walk over the farm. Somehow it looked different from what it had an hour before.

This year they profited by their mistakes of the previous one and raised good crops, but found little sale for them. Coon advised buying several cows and feeding them the surplus. Butter and cheese would always sell, he declared. But the boys talked the matter over and decided to wait until the farm was paid for.

Fruit was plenty this year and they made larger shipments to the Bowery dealer. And little by little, as it became more profitable, they enlarged their poultry business. At the end of the year they made a second payment of two hundred dollars and added more tools to the farm.

Another year and the place belonged to them; the younger children were advancing rapidly in the day school, books and papers found their way to the farm-house, and a flourishing Sunday school helped to keep the home atmosphere pure and sweet.

HOUSEHOLD.

Let it Pass.

Be not swift to take offence,
Let it pass;
Anger is a foe to sense,
Let it pass.
Brood not darkly o'er a wrong
Which will disappear ere long;
Rather sing this cheery song—
Let it pass,
Let it pass.
Strife corrodes the purest mind,
Let it pass;
As the unregarded wind,
Let it pass.
Any vulgar souls that live
May condemn without reprieve;
'Tis the noble that forgive.
Let it pass,
Let it pass.
Echo not an angry word,
Let it pass;
Think how often you have erred,
Let it pass;
Since our joys must pass away
Like the dewdrops in the May,
Wherefore should our sorrows stay?
Let them pass,
Let them pass;
If for good you've taken ill,
Let it pass.
O! be kind and gentle still,
Let it pass.
Time at last makes all things straight;
Let us not resent, but wait,
And our triumph shall be great.
Let it pass,
Let it pass.
Bid your anger to depart,
Let it pass;
Lay these timely words to heart,
Let it pass.
Follow not the giddy throng,
Better to be wronged than wrong;
Therefore sing the cheery song—
Let it pass,
Let it pass.

Sir Isaac Holden.

Within the last few days the grave has closed over all that was mortal of one of the most remarkable men of this century, who from the humblest possible beginning died an English millionaire. But it was not his money that made him noteworthy. He came of good sound stock to start with. His father was a very small farmer in Cumberland, eking out a mean living by lead mining, but was forced to leave that and settle in Renfrewshire, Scotland, in the beginning of this century, where his son was born in 1807. Times grew still harder, and it was difficult even for the most industrious and thrifty to earn enough to keep life in. Schooling was much rarer at that time in England than in Scotland, but the poor, overwrought miner saw its value, and did his best to keep his boy at school, but was not always successful. Isaac had to work very long hours as "draw boy" to a hand loom weaver for the sake of adding a few pence a day to the family income. Sometimes he could get off work for a time and get to school in daytime; sometimes he had to work all day in a cotton mill, and get a little more education at a night school. He was the kind of boy that difficulties did more to help than to hinder. He managed at last to keep at school all the time till he was 15, when he was apprenticed to his uncle as a Paisley shawl weaver, but that proved too much for his strength, and he again turned to schooling, becoming

ing assistant to his teacher at the age of 16. When 18, his father died, and he had then to support his mother and a younger brother. As he advanced towards manhood, the example of his parents and the deep sympathy he felt with all moral and intellectual progress tended to give his mind a decided religious cast, and he became a member of the Methodist denomination. After teaching a year or two an accident changed the whole tenor of his life. Mr. William Townsend, a member of the firm of Messrs. Townsend Brothers, Cullingworth, Yorkshire, happened to be in Glasgow, and being in want of a bookkeeper Mr. Holden was recommended to him. Mr. Holden accepted the appointment offered him, and at the end of November, 1830, he was installed in his new office. This may be said to have been the turning point in his career. At this time he was 23 years of age, and from that time he devoted his whole energy and ability to industrial pursuits. At the time Mr. Holden came to Cullingworth wool-combing was carried on by manual labor. He set himself to overcome the difficulty of inventing a machine for the work. For a year only Mr. Holden acted as bookkeeper to Messrs. Townsend. It was soon evident that the mill was his proper sphere, and in it he was soon appointed manager, and subsequently partner. He went to the mill every morning at six, and seldom left it before ten at night, and only on one or two occasions during fifteen years did he take a holiday.

In 1846 he went into partnership at Bradford with Mr. Lister, and devoted his attention more and more to the perfecting of his wool-combing machinery, at the same time crossing to France, where he established similar works and conducting his rapidly increasing business with untiring energy, sometimes working almost night and day. In 1860 he took into partnership his two sons, employing all the time the best skill that money could buy to help him in perfecting his machinery. To accomplish this the firm purchased a small mill at Bradford, and adapted it as a mechanics' shop for experiments. During the succeeding four years £20,000 was spent in experiments, but the result fully justified the expenditure. Soon after the opening of the Alston works in 1864 the workshop which had been so productive was closed. Mr. Thomas Craig, who had assisted Mr. Holden very much in maturing inventions, was appointed managing partner of the new works, and he still holds that position. The Alston works are situated in Thornton Road, where the worsted industry may be said to have been cradled. They are solid and substantial. Combined, Messrs. Holden's various establishments are a mighty concern. Nearly 4,000 people are employed in them. Thirty-one engines, representing a combined horsepower of 4,357, were recently employed in working the machinery. Sir Isaac, who has always taken a deep interest in political matters, was an advanced Liberal. He was made a Baronet in 1893, and was a Deputy Lieutenant and a Justice of the Peace for the West Riding, and had a seat in parliament as a supporter of the Gladstone administration for a good many years. He was always a generous supporter of religious and philanthropic movements. He lived in the simplest possible way himself, attributing mainly to that his long life and mental activity.

The career of a man who from the very humblest and most adverse beginnings reached such a position of influence and prosperity, was naturally of great interest to all who knew him, and he was always willing to encourage others by a reference to his own early struggles and privations. When on the eve of his 90th year he was

interviewed by a newspaper reporter, and gave in his own bright and humorous fashion a few pointers as follows:—

"Latin I learned at 13 years of age; Greek at 17; French at about the same time; Italian at 19, and German at 40. Although I could not perhaps speak all of the modern languages very well, I could read them. To speak French properly you require to live in France for a while. I lived there for twelve years and acquired great facility in the pronunciation of the language."

The virtues of Scots broth I found Sir Isaac never to tire of praising. "Science," said he, "showed it to be an excellent food. If you can live fairly well on Scots broth you will never have rheumatism. It is the potash in the vegetables that does it. It keeps up the alkalinity of the blood. It gives you potash in its natural form. The potash of the chemists and the potash of nature are two different things. Garden vegetables are rich in potash. The English boil their vegetables and pour out the water, and eat the residue. The water has taken away the potash. Scots broth is the natural heritage of the Scots, and has gone far to making them the wonder they are."

"I may speak well of the Scots," he playfully added, "because I am not really a Scotsman. My father went from Cumberland into Scotland in 1801, only six years before I was born."

"But you were born in Scotland," I remarked, in the way of a reminder.

"Yes," he answered, "and fortunately for me that I was. I should not have had the education I had otherwise. My old schoolmaster, although in a humble school, was a graduate of the University. I made my living by teaching, amongst other things, until I was 23."

"We had not long school hours in Scotland. Only two hours at a time, and fifteen minutes' play in that brief space. Forty years ago the Scots were the best educated nation in the world. It is only since that time that the Germans have stolen a march upon them."

It was long maintained that Sir Isaac was the inventor of the lucifer match, but this honor he himself disclaimed.

The lesson of such a life is obvious. If a boy has as few chances as the son of a Galician away back in Dauphin, the way to usefulness and some measure of reward is more open to such a boy to-day than it was to Isaac Holden 90 years ago. Pluck, perseverance, principle are the magic keys to open that way.

We Eat Too Much.

Prof. Eaton says we eat too much. Sandow, giving his daily performance at a time when the work was excessively severe, with his 200 pounds of bone, sinew and muscle, consumed no more food than is usual for men at light labor. Weston, the champion long distance walker, while walking 310 miles in five days, in one day covering 95 miles, ate less food than a child ordinarily does. It has been observed that the excess of food in the case of men with sedentary habits, or men at light manual labor, is in the nitrogenous foods (flesh, eggs, cheese, etc.), rather than in the carbonaceous (starches, sugar, and fat.) Especially during the summer should we abstain from eating too much. Lent comes a little too soon from a dietary standpoint. Food is fuel, and it is just as foolish to feed coal into our furnaces in hot weather as to gorge ourselves with fatty foods.

The Christian home is the mightiest instrument in the work of regenerating and elevating the human race.—Dr. M. C. Peters.

Linger Not.

The time is short ?
If thou wouldst work for God, it must be now ;
If thou wouldst win the garland for thy brow,
Redeem the time.
Shake off earth's sloth !
Go forth with staff in hand while yet 'tis day ;
Set out with girded loins upon the way ;
Up ! linger not !
Fold not thine hands !
What has the pilgrim of the cross and crown
To do with luxury or couch of down ?
On, pilgrim, on !
With his reward
He comes ; he tarries not ; his day is near ;
When men least look for him will he be here ;
Prepare ! for him
Let not the flood
Sweep thy firm feet from the eternal rock ;
Face calmly, solemnly, the billows' shock ;
Fear not the storm !
Withstand the foe ;
Die daily, that forever thou mayst live ;
So faithful unto death, thy Lord will give
The crown of life.

—Bonar.

Beecher and His Son.

Young men are too indifferent to good advice, based upon the life experiences of those of more mature years. Self-confidence, ambition or a blind belief in the infallibility of luck often blinds the youth to the dangers that lie in the pathway of success. We have read many maxims of value, but never were the rules of conduct formulated in better taste than the advice contained in a letter from the Rev. Henry Ward Beecher to his son Herbert. The letter bears date of Oct. 18, 1878, and find its way into print for the first time. We commend it to the young readers of The Farmer:—

My Dear Herbert—You are now for the first time really launched into life for yourself. You go from your father's house and from all family connections to make your own way in the world. It is a good time to make a new start, to cast out faults of whose evil you have had experience, and to take on habits, the want of which you have found to be so damaging.

1. You must not go into debt. Avoid debt as you would the devil. Make it a fundamental rule: No debt—cash or nothing.

2. Make few promises. Religiously observe even the smallest promise. A man who means to keep his promises cannot afford to make many.

3. Be scrupulously careful in all statements. Accuracy and perfect frankness, no guess work. Either nothing or accurate truth.

4. When working for others sink yourself out of sight, seek their interest. Make yourself necessary to those who employ you, by industry, fidelity and scrupulous integrity. Selfishness is fatal.

5. Hold yourself responsible for a higher standard than anybody else expects of you. Demand more of yourself than anybody else expects of you. Keep your personal standard high. Never excuse yourself to yourself. Never pity yourself. Be a hard master to yourself, but lenient to everybody else.

6. Concentrate your force on your own proper business ; do not turn off. Be constant, steadfast and persevering.

7. The art of making one's fortune is to spend nothing ; in this country any industrious young man may become rich if he stops all leaks and is not in a hurry. Do not make haste ; be patient.

8. Do not speculate or gamble. You go to a land where everybody is excited and strives to make money, suddenly, largely and without working for it. They blow soap bubbles. Steady, patient industry is both the surest and the safest way. Greediness and haste are two devils that destroy thousands every year.

9. In regard to Mr. B——, he is a southern gentleman ; he is receiving you as a favor to me ; do not let him regret it.

10. I beseech you to correct one fault—severe speech of others ; never speak evil of any man, no matter what the facts may be. Hasty fault-finding, and severe speech of absent people, is not honorable, is apt to be unjust and cruel, makes enemies to yourself, and is wicked.

11. You must remember that you go to Mr. B—— not to learn to manage a farm like his. One or two hundred acres, not 40,000, is to be your future homestead ; but you can learn the care of cattle, sheep, the culture of wheat, the climate, country, manners and customs, and a hundred things that will be needful.

12. If by integrity, industry and well-earned success you deserve well of your fellow-citizens, they may in years to come ask you to accept honors. Do not seek them, do not receive them while you are young—wait ; but when you are established you may make your father's name known with honor in halls of legislation.

Lastly, do not forget your father's and your mother's God. But do not despise small churches and humble preachers. "Mind not high things, but condescend to men of low estate."

Read often the proverbs, the precepts and duties enjoined in the New Testament. May your father's God go with you and protect you.

Good Recipes.

Chicken Broth—Cut up a light feathered chicken and cook in one quart of cold water. When boiling skim off fat ; add salt and one tablespoonful of rice. Simmer for two hours. Remove any fat before serving ; strain out bones and rice.

Stewed Chicken—Skin and cut up in neat pieces a light feathered chicken and lay the pieces in boiling milk, enough to cover them, and stew gently three-quarters of an hour. A small piece of onion, pepper, salt and one bay leaf or mace can be added to the milk if wished, and removed before serving.

Toothache—For the distressing ailment that philosophy will not cure, if we may believe Shakespeare, there are no remedies in old school medicine save such as kill, or, at least, deaden the nerves. Homoeopathy, however, has won some of its greatest laurels, and certainly some of its most grateful friends in the cure of toothache. It need not be said here that everyone should be on intimate terms with his dentist, as that fact will do much towards avoiding the distressing pains of aching teeth, but it will not do all. In the latter contingency, and even where the cause is a neglect of the dentist, Homoeopathy is a harbor of refuge.

Probably the remedy that is oftenest called for is Mercurius. It is peculiarly adapted to the pain in decayed or carious teeth, pain that may not be confined to the affected tooth but involve other parts of the head. The pain is worse from warmth and eating and drinking, and may be relieved a little by cold applications, yet a draft of cold air will aggravate the pain. The gums are apt to

be red and swollen ; in some cases spongy, receding from the teeth and bleeding easily. This is a general picture of the toothache that a few doses of Mercurius 6 will almost surely relieve.

Bryonia has a toothache all its own, a species of rheumatism of the teeth. There is no inflammation ; but a tearing pain that may shift from one tooth to the other ; sometimes there is a sensation of the teeth being loose or too long. Touching the teeth does not make them worse. Lying on the affected side is apt to relieve the pain a little.

A throbbing violent pain, breaking out in paroxysms, red gums, red cheeks, congestion of the head, chill, heat and thirst is a call for Belladonna. It is a toothache that is akin to neuralgia.

A toothache that goes through half the jaw, you cannot point out any particular offender, that is better in the open air and gets worse when entering a warm room ; whose pain is apt to shoot into the eyes, ears or temples, that shows no inflammation or swelling ; whose victim is apt to be chilly, will be scattered by a few doses of Pulsatilla.

A pain that is not throbbing, nor confined to one tooth, but seems to flash about, darting to other parts ; that is better for warm applications, calls for Spigelia.

A child gets a toothache in a warm bed ; is nervous and restless ; one cheek red ; much saliva ; Chamamilla will probably give relief.

When toothache is caused by exposure to wet and cold Rhus tox will cure it and other aches and pains from the same cause.

There are other toothache remedies, but the foregoing will meet nearly all forms of the ailment.—Homoeopathic Envoy.

The following is, says the Australian Sunday School Teacher, from a boy's essay on total abstinence : "I abstain from alcoholic drinks because, if I would excel as a cricketer, Grace says, 'abstain ;' as a walker, Weston says, 'abstain ;' as an oarsman, Hanlan says, 'abstain ;' as a swimmer, Webb says, 'abstain ;' as an orator, Bright says, 'abstain ;' as a missionary, Livingstone says, 'abstain ;' as a doctor, Clark says, 'abstain ;' as a preacher, Farrar says, 'abstain.' Asylums, prisons and workhouses repeat the cry, 'abstain.' " We have heard a long speech with less in it.

The elder Baron Rothchild had these rules posted upon the walls of his bank : Shun liquors ; dare to go forward ; never be discouraged ; never tell business lies ; be polite to everybody ; employ your time well ; be prompt in everything ; pay your debts promptly ; bear all troubles patiently ; do not reckon upon chance ; make no useless acquaintances ; be brave in the struggle of life ; maintain your integrity as a sacred thing ; never appear something more than you are ; take time to consider, then decide positively ; carefully examine into every detail of your business.

Make a place for yourself in the world. Just go to work and make it. Don't stand around waiting for somebody to furnish you with a job. Create something which people want, which they cannot easily do without, and they will give you all the work that you can do, and pay you your price for it. Sitting down and wishing that the crowd would come your way will never put a dollar in your pocket. Make it to its interest to come your way. Get a "cinch" on something which it can use in its business. You can never fit yourself so well to a place in the world which someone else has made and given to you as to one which you have made for yourself.

Morning Exercises.

Bee-ell! Bee-ell! O Bee-ell! my gracious.
Air you still sleepin' ?
The hour hand's creepin'
Nearder five.

(Wal' blast it ef this aint vexatious !)
Don't ye hyar them cattle callin' ?
An' th' ole red steer a-bawlin' ?
Come, look alive !
Git up ! Git up !

Mar'ann ! Mar'ann (just hyar her snorin' !)

Mar'ann ! it's behoovin'
Thet you be a-movin' !

Brisk, I say !

Hyar the kitchen stove a-roarin' ?
The kittle's a-spilin' !
To git hisse'f bilin'.
It's comin' day.
Git up ! Git up !

Jule, O Jule ! Now, what is ailin' ?
You want ter rest ?

Wal', I'll be blest !

S'pose them cows

'Ll give down 'thout you pailin' ?

You must be goin' crazy ;

Er, more like, gittin' lazy.

Come, now, rouse !

Git up ! Git up !

Jake, you lazy varmint ! Jake ! Hey, Jake !

What you layin' theer fer ?

You know the stock's to keer fer ;

So hop out !

(Thet boy's wusser'n a rock ter wake !)

Don't stop to shiver,

But just unkniver,

An' pop out !

Git up ! Git up !

Young uns ! Bee-ll ! Jake ! Mar'ann !
Jule !

(Wal, blast my orn'ry skin !

They've gone ter asleep agin,

Fer all my tellin'.)

See hyar, I ain't no time ter fool !

It's the last warnin'

I'll give this mornin'.

I'm done yellin' !

Git up ! Git up !

Wal' whut's the odds—an hour, more or less ?

B'lieve it makes 'em stronger

Ter sleep a liddle longer

Thar in bed.

The times is comin' fast enough, I guess,

When I'll wish, an' wish 'ith weepin',

They was back up yender sleepin',

Oovrhead,

Ter git up.

—National Stockman.

Getting an Education.

Boys say to me : "We want an education, but we can't get it ; so we are going to learn a trade, or go into a store or something else." Now, let me say that every boy who wants an education, if he will bend his force to it, can get just as good a one as he wants. The way is open. Education doesn't come through academies, colleges, seminaries, though these are great helps ; but it comes by study and reading and comparing ; and all the schools and colleges and seminaries in the world will not make a scholar of a man without these ; and with them a man will be one if he never see a college. And what is true of boys is true of girls, and what is true of this pursuit, is of any other. The force must be in yourself, and you must develop it. It is that indomitable "I can" that sets a man astride in the world.—Onward.

Ever man who is educated at all is self-educated, of course. Schools and col-

leges help one mightily sometimes, but after all he must do the work himself. One man's idea is that it can be as well done by correspondence as by personal contact with professors. But can it ? Or rather will it, in most instances ? Will not most of the "students" in such an institution learn superficially, and, still worse, learn to regard superficiality as quite as good as thoroughness ? It has sometimes seemed to us that such results were observable in connection with Chautauqua work.

There is a good deal of humbug about the regular universities and colleges, but at any rate they maintain certain standards of acquirement and exact certain tests when the work is done, which no correspondence university can do.

The word "university" has a definitely accepted meaning. It means something which such an institution is not intended to be. Why then call the institution by a misleading name ? Is not this in itself a bit of dangerous education in sham at the outset ?

However, the misnamed institution will doubtless render to many earnest minds engaged in sincere culture. If it also ministers to the vanity and false pretense of shallow and frivolous minds we do not know that any very great harm will be done. After all, it doesn't much matter what happens to such minds.

Men who are Bound to Rise.

History has taught us that no circumstances are too humble for a child born in them. It has also taught us that poverty is frequently a help rather than a hindrance, and that the right kind of a man will make circumstances bend to his purposes, and not let circumstances bend him.

There is a breed of heroes, which is never extinct in any age of the world, who delight in obstacles, and who make poverty, disadvantages, and youthful deprivations only serve as the rounds of the ladder by which they climb to greatness. They do not sit down and whine because others are more fortunate than they. They take fortune as it comes, uncomplainingly, and by a kind of mysterious alchemy, as it were, transmute misfortunes into benefits.

But few great men have been developed from among the poor of the cities. The dwellers in the wretched tenements of the large cities do not train children to greatness. The fresh air, the healthy surroundings, the wholesome influences of the country are lacking. The crowded tenements of the city too often, alas, train up the children born under the evil influence to lives of degradation. The germs of greatness rarely flourish there.

One great secret of happiness is never to allow your energies to stagnate.

The New York Witness says that a merchant who advertised for an experienced clerk at a salary of \$12.00 per week, received 200 answers from men who had held good positions, and were now so reduced that they were glad to accept any place in which they could earn a fair living. This illustrates the ups and downs, and particularly the "downs" of city life. The percentage of failures in business life is astounding and the misery and poverty that results are almost beyond belief. Such suffering and privations seldom come to country homes. Whatever else of hardship and hard work those who live in the country are called on to endure, they have enough to eat and generally enough to wear, and never know what it is to seek day after day for an opportunity to work and earn a living.

Ambition.

I want to be a hero great,
The biggest of the kit ;
I do not care what kind at all,
As long as I am it.
Perhaps upon the vasty deep,
When all with fear are dumb,
To go and stop the leaking ship
By sticking in my thumb.
Perhaps upon the city streets
Some child upon the track
I'd save by seizing on the car
And holding of it back.
Perhaps in some big bloody war
As General I'd go,
And with my strong right hand knock
off
The heads of all the foe.
That's what I'll be when I grow up,
A hero big and stout,
And in parades go stalking by,
And hear the people shout.

—Carlyle Smith.

Books are the truest wealth of the world, and the fit inheritance of generations and of nations.—Thoreau.

It is not the greatness of a man's means that makes him independent, so much as the smallness of his wants.—Cobbett.

Not the warrior, nor the statesman, nor yet the master worker, as such, but the teacher, in our days, leads the vanguard of humanity.—Horace Greeley.

David Star Jordan, president of Stanford University, says : "One of the most disquieting features of the social condition of our times is the rush of young men to the cities. Resulting from this is the weakness and instability of the farming population as compared with the same class half a century ago. Steadiness of national character goes with firmness of foothold on the soil. We may well look with alarm on a condition in which all men of wealth and power shall be gathered in the cities, while the farms are left to the weak and inefficient or to the peasants of other nations. As matters are, the cities are great destroyers of human life. We have not learned properly to govern them nor to make them effective, and every city is full of human failures, results of misdirected effort. A tour of the principal streets, halls and meeting places on Sunday evening in any great city will show how terribly true this is. Certainly one-fourth the present population of such a city as San Francisco, for example, has no real business there. These people are doing nothing which is effective for themselves or helpful to others, and the condition of the other three-fourths, and most likely their own condition, would be distinctly improved if these misfit persons would go back to the farms."

PROVINCIAL LAND SURVEYORS' ASSOCIATION.

Under authority of sections 39, 40 and 41, Cap. 121, R.S.M., the following only are entitled to practice as Provincial Land Surveyors in Manitoba :

Bayne, G. A.,	Winnipeg Bouchette, C. J.,	Selkirk W
Bourne, Robt.,	"	Francis, J.,
Doupe, Joseph,	"	McFadden, M.,
Doupe, J. L.,	"	Neepawa.
Ducker, W. A.,	"	Rombough, M. B.,
Harris, J. W.,	"	Morden.
Lawe, Henry,	"	Vaughan, L. S.,
McPhillips, R. C.,	"	Selkirk, W
Simpson, G. A.,	"	
Young, R. E.,	"	

By order,

J. W. HARRIS, Secretary,

P. L. S. Association.

N.B.—The practice of surveying in Manitoba by any other persons is illegal, and renders them liable to prosecution.

The Hardships of Gold Mining.

The discovery of gold in the Arctic circle is going to show how much men will endure on the chance of getting rich quickly. Cold, which sinks far, far below the point called zero; provisions not to be procured; the ground hard as stone; the sheer impossibility of working in the winter for more than two days at a time; the chance of securing some three or four ounces of gold in a day of good fortune; no means of replacing clothes worn out; no means of building a house; everything to be painfully dragged over mountain passes and perpetual snow and ice. Can you imagine more miserable conditions of existence? The miners of California and Ballarat suffered horrible privations; they starved; they took fevers; they got dysentery; they died like sheep; but at least they had a splendid climate to work in; they had a hot sun overhead. And their crowding in by thousands led to the settlement of the country. Nothing will lead to the settlement of Alaska. The miners will come, the miners will go; the misery of the work and the hardships of the life must continue. Even if a railway were run all the way to the river Yukon, so that provisions and necessities of all kinds could be taken there, the hardships of the long and intense cold would continue. Suppose, however, the gold were found in really great quantities, so that gold would become as cheap as silver, how would that affect things? One would like to know. Meantime there are about £1,000,000,000 sterling of gold in the world. The whole amount weighs less than 10,000 tons. So that a single great Atlantic liner could carry the whole of the gold above ground. If these new gold mines pour out in ten years as much gold again as there is now, I suppose the value of the gold will be halved. I cannot pretend to go any further, but it does seem to me a discovery of very doubtful advantage.—Walter Besant, in *The Queen*.

Immense, says Science Siftings, as is the value of the gold taken from the Californian mines since the discovery of the precious metal there, it could all be contained in a room 40 feet long, 20 feet wide and 15 high.

"Wouldst thou rather be a peasant's son that knew, were it never so rudely, that there was a God in heaven and in man; or a duke's son that only knew there were two and thirty quarters on the family coach?"—Carlyle.

A Woman's Paradise.

Thomas De Quincey, in one of his essays, says, "The loveliest sight for a woman's eye is her firstborn child. And the holiest sight upon which the eyes of God settle in almighty sanction and perfect blessing is the love which soon kindles between the mother and her infant; mute and speechless on the one side, with no language but tears and kisses and looks." The essayist declares that romance is the product of Christianity, and that so is sentiment. "Well is it for the glorification of human nature that through these holy things the vast majority of women must forever pass." De Quincey, as a result of his own observations, affirms that nineteen times out of twenty the true paradise of a female life in all ranks not too elevated for constant intercourse with the children, is by no means the year of courtship, nor the earliest period of marriage, but that sequestered chamber of her experience in which a mother is left through the day attended by one sole companion, her firstborn angel, as yet clinging to her robe, imperfectly able to walk, still more imperfect in its prattling and innocent thoughts, clinging to her, haunting her wherever she goes as her shadow, catching from her eye the total inspiration of its little palpitating heart, and sending to hers a thrill of secret pleasure so often as its little fingers fasten on her own. De Quincey believed that this condition of noiseless, quiet love is that, above all, which God blesses and smiles upon.

Far back in the ages,
The plough, with wreaths, was crowned;
The hand of kings and sages
Entwined the chaplet round.
Honor waits o'er all the earth,
Through endless generations;
The art that calls her harvests forth
And feeds the expectant nations.
—William Cullen Bryant.

Religion cannot pass away. Be not disturbed by infidelity. Religion cannot pass away. The burning of a little straw may hide the stars, but the stars are there and will re-appear.—Thomas Carlyle.

The great principle at the bottom of all successful feeding of children is that an infant is nourished in proportion to his power of digesting the food he is given, and not in proportion to the quantity of nutritious material he may be inclined to swallow. Overtaxed digestive organs cause most of the suffering and mortality among infants.

If a Body Finds a Lesson.

Tune—"Comin' Thro' the Rye."

If a body finds a lesson
Rather hard and dry,
If nobody comes to show him,
Need a body cry?
If he's little time to study
Should he stop and sigh;
Ere he says, "I cannot get it,"
Ought he not to try?
If a body scans a lesson
With a steady eye,
All its hardness he will conquer,
Conquer by and by.
Then how neatly he'll recite it,
Face not all awry.
Ne'er again he'll say, "I cannot!"
But will go and try.

A gentleman was visiting a Scotch lunatic asylum, which was being enlarged. The inmates were assisting at the work. On seeing one of the latter wheeling a barrow upside down from the building to the stones, the visitor asked him why he wheeled it in that manner. "Oh," said the lunatic, "that's the best way." The visitor took the barrow, and, turning it over, said, "this is the proper way." "That's a' you ken," said the inmate. "I tried it that way, but they filled it fu' o' bricks." Thus saying, he trotted on in his usual way.

One of the first things to teach the little child who has arrived at the dignity of a seat at the table, and a plate, fork, spoon, and cup, is that he must wait patiently until he is served, and then eat slowly and neatly. Accidents will sometimes happen, but if he tries to behave well, do not punish him for these. Never allow him to play with victuals or dishes. He will no doubt be inclined to hammer on his plate with his fork, rattle his spoon in his cup, etc., but it is best to check these demonstrations at the outset. By the time a child is five years old he ought to eat as neatly and quietly as any one. No habits are unlearned with more difficulty than table usages, and in none is the influence of early training more potent. The child that is allowed to eat his food in a slovenly manner, and to sacrifice good breeding to haste, will be very apt to forget at inopportune times, when he is a man, the manners he may learn later, and in unguarded moments reveal the deficiencies of his early training. It is just as important that our children learn to eat properly as that they learn to speak correctly, and behave with decorum in other respects.

Smoke



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Wheat Options.

W. E. Bear, the well-known writer on political economy, read a paper before the London (Eng.) Farmers' Club dealing with "Wheat Options." In the course of his remarks, Mr. Bear dealt with the subject from the point of view of the farmer. After explaining the intricacies of the question, the speaker referred to the effects of the system, pointing out the extent to which spot prices were regulated by the prices ruling in America for "paper" wheat. Mr. Bear then came to what he termed his first indictment. It interfered with and governed legitimate trading. The lecturer dealt with the influence of the "bull" and the "bear," which, he maintained, was not in any sense counteractive. In other words, prices did not in consequence become self-balancing. Nearly all the merchants whom he had conversed with on Mark Lane were agreed upon this point. The daily offering of vast quantities of fictitious wheat tended to lower prices. "It is objected," continued the speaker, "that there are as many buyers as there are sellers. This would be the case if the actual quantity of wheat were multiplied ten times. There would always be buyers at a price, and yet no one will contend that the offer of ten times the quantity of real wheat would not lower prices. It may be objected that enormous purchases of fictitious wheat raise the prices on a particular day, just as great offers depress them. Then why do not the ordinary purchases of fictitious wheat, which go on daily, tend to raise prices, though in a less degree?" This last argument, the speaker said, was the strongest which the supporters of the option system had. The conclusions arrived at by the speaker were as follows:—(1) That the option system is a system of gambling which ought not to be allowed in the commercial exchanges of any country; (2) that the price quotations of the great option markets are those of gambling transactions, and that they entirely rule the prices of wheat in the United States, and influence the prices of grain of all kinds throughout the world; (3) that profuse offerings of fictitious wheat have a lowering effect upon the market prices; (4) that the maintenance of the option system involves the active operation of men who are professional market wreckers; (5) that in ordinary times the "bears" are much more powerful than the "bulls," because it is easier to create panic than to produce inflation, also because most of the persons who rank as "bulls" are the outsiders who have no opportunities of manipulating the markets; (6) that the fixing of low prices for distant "futures" reduces the prices of spot wheat and near "futures," and tends to stereotype the prices of distant months at low rates; (7) that the gambling and trickery of "bears" and "bulls," and their frequent defalcations, create a constant feeling of insecurity among capitalists, and so exercise a generally depressing effect upon the markets.

Adversity is sometimes hard upon a man; but for one man who can stand prosperity there are a hundred that will stand adversity.—Carlyle.

"Mercy!" cried Mr. Barker at the restaurant. "Waiter, is this Neufchatel cheese?"

"Yes, sir," said the waiter. "Well—I must say it tastes like very old chatel cheese. Bring me some cottage cheese instead, and be sure it is made of some cottage since the original Queen Anne period."

World's Wheat Harvests.

Harvesting of wheat is going on nearly all the year round. In the United States the harvest begins in May in Texas and is continuous northward, ending in Canada in September. In parts of Northern Europe, for instance, in the north of Scotland, some wheat is cut as late as October. In South America the wheat harvest begins in October, with the little that is raised nearest the equator, and continuing southward, receding from the equator through November, December, January and into February in Patagonia. The largest amounts of South American wheat are raised in the Platte river countries, mainly in Argentina, which occupies the same degrees of latitude in the southern hemisphere as this country does in the northern, and there the harvest begins in December and runs through January. In the Australian colonies wheat harvest begins in December and runs through January. Some wheat is cut in India in February, as also in parts of Africa north of the equator, and harvest continues in these countries through March, April and May, ending in India in April and in North Africa in May.

As a rule, the sun being six months north of the equator, then six months south of it, the harvest in same latitude on either side will be six months apart; but this rule is varied by location with reference to the sea, the gulf stream and also by altitude. Most of the wheat of the world is cut in June, July and August.—Farm Implement News.

A very small lot of books will serve to nourish a man's mind if he handle them well.—Carlyle.

A lawyer gave his son this parting advice: "My boy," said he, "if you have law on your side, stick to law and don't mind facts; if facts are on your side, stick to facts and don't pay any attention to the law. If, however, you have neither law nor facts upon your side, why—throw dirt."

A bald-headed countryman tried several bottles of advertised hair restorer without effect. Finally he went to the druggist to complain of the stuff, and the tradesman expressed his astonishment that the preparation had not given satisfaction. "Well, look here, now," said the countryman, "I don't mind drinking just one more bottle, but if that don't fetch it, darned if I don't quit!"

In a letter from his old home in England, where he has been visiting lately, Mr. Wm. Compton, a well-known farmer near Manitou, draws attention to one striking difference between our harvest practice here and the eternal swilling of beer and cider that prevails there. He says: "They give from eight to ten shillings per acre, and beer, for cutting grain. A good many of my friends wanted to know what we cut our harvest with out in America. I told them we cut it with a self-binder, and drank water. They turned up their noses and said, 'That's all I want to know. It would kill me to work on water. I must have my beer.' And it is beer drinking indoors and out. Beer, beer, beer, the greatest curse to the working people of England to-day, and is still a load-stone to others that have left it for other lands. What a blessing it would be could they but see it in its true light, and recognize it as the greatest enemy to their homes and happiness both here and hereafter." Our harvest diet here in Canada cannot be beaten in the whole world as a substantial food for a hard-working man.

You will Never be Sorry.

For living a pure life.
For doing your level best.
For being kind to the poor.
For looking before leaping.
For hearing before judging.
For thinking before speaking.
For harboring clean thoughts.
For standing by your principles.
For stopping your ears to gossip.
For being as courteous as a duke.
For asking pardon when in error.
For being generous to an enemy.
For being square in business dealings.
For giving an unfortunate person a lift.
For promptness in keeping your promises.
For putting the best construction on the acts of others.

The Farmer acknowledges the receipt of half a dozen 1st prize Swede turnips at Kildonan fair, from Chas. Midwinter. They are indeed beauties.

Contrary to general belief, the Sahara is not a barren and worthless waste. Some time ago there were 9,000,000 sheep in the Algerian Sahara alone, beside 2,000,000 goats and 260,000 camels. On the oases there are 1,500,000 date palms.

It is a law in vegetable life that no plant can long survive which is deprived of its leaves. Keeping the top cut off will destroy any plant. Some are more easily killed than others, but no plant can long endure their continued destruction.

The old country has been visited by a second sample of the western cyclone. This time it was in the North of Scotland and hailstones fell as large as hen's eggs. In one case it was a piece of ice weighing 21 lbs!! The London Mansion House fund in aid of the Essex sufferers has mounted up to over \$100,000.

A prominent physician claims that there will be no diphtheria, scarlet fever, nor worms for children if they eat plentifully of onions every day, especially when there is a scarcity of fresh fruit. He buys the onions by the barrel for his young folks, and they are served in every style.

A candle that won't shine in one room is very unlikely to shine in another. If you do not shine at home, if your father and mother, your sister and brother, if the very cat and dog in the house are not the better and happier for your being a Christian, it is a question whether you really are one.—J. Hudson Taylor.

He is a nobleman in God's peerage who goes out every morning, it may be from the humblest of homes, to his work and to his labor until the evening, with a determination, as working for a heavenly Master, to do his best; and no titles which this world can bestow, no money which was ever coined, can bring a man who does no work within the sunshine of God's love.—Dean Hole.

Statistics from the last census show that the United States contains to-day 4,564,000 farms, of an average size of 137 acres each. Of the bread-winners among the people 44 per cent. are engaged in agricultural pursuits, only 22 per cent., or just one half as many, are engaged in manufacturing. Twenty-three per cent. are in professions of all kinds and in personal service, and 11 per cent. are engaged in trade and transportation. It will thus be seen that farming is by far the largest interest, engaging the most people. Of these 4,564,000 farms, a fraction more than 71 per cent. are occupied and cultivated by their owners and a fraction more than 28 per cent. are occupied by tenant farmers.—Prof. Georgeson.